

386. The following is a summary of the pensions and superannuation allowances, of all descriptions, payable out of the general revenue during the year 1883-4 :—

Summary of retiring allowances.

SUMMARY OF PENSIONS AND RETIRING ALLOWANCES PAYABLE *
FROM THE REVENUE, 1883-4.

	£	s.	d.
Former Ministers of the Crown	1,800	0	0
Lady Darling and Mrs. Petrie	1,100	0	0
Former clerk of Parliaments	500	0	0
„ judges of County Courts	3,375	0	0
„ officers of the Civil Service	32,714	6	10
„ „ Railway department	55	8	3
„ „ Lunacy department	342	14	3
„ members of Defence forces	9	9	0
„ police	12,000	0	0†
Other allowances, voted by Parliament	14,355	1	0
Total	£66,251	19	4

387. Retiring allowances, pensions, and gratuities to officers to be thereafter appointed in the public service were abolished on the 24th December, 1881, by Act 45 Vict. No. 710. Judges of the Supreme Court, officers and members of the police force, and persons then employed in the public service, are specially exempted from the operation of the Act.

Abolition of pensions.

PART IV.—VITAL STATISTICS.

388. In pursuance of the provisions of Act 28 Vict. No. 268, records are kept of all marriages, births, and deaths which are known to occur in Victoria. The marriages are recorded by registrars of marriages or by clergymen throughout the colony, and the births and deaths by deputy registrars. The marriage registrations are made in triplicate, one copy being forwarded to the Registrar-General, one retained by the lay registrar or officiating clergyman, as the case may be, and the third given to the parties married. The birth and death

Registration system for marriages, births, and deaths.

* The amounts actually paid were, owing to the deaths of recipients, in some instances less, and, owing to the payment of arrears, in some instances more, than these.

† These figures represent the amount payable from the general revenue, which consist of the usual endowment of £2,000, and an additional grant of £10,000 voted by Parliament. For total of retiring allowances to the police from all sources, see paragraph 382 ante.

registrations are made in duplicate, one copy being forwarded to the Registrar-General and the other retained by the deputy registrar.

Time of registration dealt with in compiling statistics.

389. It is found convenient to deal with the records according to the periods in which the marriages, births, and deaths are registered, rather than those in which they occur. And—since the registration of a death should in all cases precede burial, and the registration of a marriage is simultaneous with the marriage itself—the registrations in the former case closely, and in the latter case entirely, agree with the actual occurrences during any period. In the case of births, however, there is a wider margin, since the legal limit of registration extends to two months, and may in special cases extend to twelve months, after the date of birth; the effect of which is, not that the numbers in one period differ much from those in another not distant period of similar duration, but that, in view of the length of time over which the non-registration of a birth is permitted to extend, and the natural tendency of some persons to postpone whatever is not absolutely necessary to be done on a particular day, a certain number of births escape registration altogether.

Marriages, 1884.

390. The marriages celebrated in Victoria during 1884 numbered 7,218, as against 6,771 in the previous year. The excess in favour of 1884 was thus 447.

Marriages, 1884 and former years.

391. More marriages took place in 1884 than in any previous year. The number solemnized annually had been almost stationary during the seven years prior to 1880, but in that year an advance was made which has been more than sustained since. In 1882, for the first time, the marriages exceeded 6,000; and in 1884, for the first time, they exceeded 7,000.*

Marriage rate.

392. The proportion which the number of marriages bear to the total population is generally called the marriage rate. This for many years had been declining in Victoria, for, whilst in the three years prior to 1863 it was above 8 per 1,000 of both sexes and all ages, from 1863 to 1865 it was between 7 and 8, and between 1868 and 1878 it was between 6 and 7, per 1,000. It reached its lowest point, 5·98 per 1,000, in 1879; but since then it has gradually revived, and in 1884 amounted to 7·63, this being the highest rate that has prevailed during the last twenty years. The following table gives the number of marriages and number of persons married per 1,000 of the population during each of the twenty-five years ended with 1884:—

* For the number of marriages during each year since the first settlement of Port Phillip, see Statistical Summary of Victoria (first folding sheet) *ante*.

ANNUAL MARRIAGE RATE, 1860 TO 1884.

Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Number of Persons Married.
1860	8.15	16.30
1861	8.21	16.42
1862	8.26	16.52
1863	7.51	15.02
1864	7.77	15.54
1865	7.36	14.72
1866	6.76	13.52
1867	6.97	13.94
1868	7.08	14.16
1869	6.89	13.78
1870	6.63	13.26
1871	6.37	12.74
1872	6.36	12.72
1873	6.50	13.00
1874	6.33	12.66
1875	6.33	12.66
1876	6.21	12.42
1877	6.31	12.62
1878	6.20	12.40
1879	5.98	11.96
1880	6.22	12.44
1881	6.79	13.58
1882	7.08	14.17
1883	7.38	14.76
1884	7.63	15.25
Mean of twenty-five years	6.93	13.86

393. It has been shown, upon more than one occasion,* that the frequency of marriage is not dependent upon the numbers of the total population, still less upon the number of marriageable women, but almost entirely upon the number of marriageable men the community contains, the tendency of whom to marry is modified by their habits and occupations, and upon the view they take of their future prospects. Thus men have a greater tendency to marry in prosperous than in dull times, and the men of a rural, and especially of an agricultural, community have a greater tendency to marry than those of an urban one. To demonstrate this, the following table has been constructed, showing the proportion of marriages to the population, to the number of single men, and to the number of single women, in each of the last five census years :—

Marriage rate at various periods.

* See *Victorian Year-Book*, 1879-80, pages 103 and 104; same work, 1880-81, pages 199 and 200; and same work, 1881-2, pages 165 and 166.

PROPORTION OF MARRIAGES TO POPULATION* AND TO SINGLE MEN AND WOMEN, 1854 TO 1881.

Year of Census.	Exclusive of Chinese and Aborigines.				
	Population.	Number of Marriages.	Proportion of Marriages per 1,000 of the—		
			Population.	Marriageable Men.†	Marriageable Women.‡
1854	234,361	3,696	15·77	52·16	245·04
1857	383,668	4,465	11·64	46·79	169·66
1861	513,896	4,528	8·81	42·34	122·36
1871	712,263	4,715	6·62	52·43	72·11
1881	849,438	5,732	6·75	57·40	48·02

Reasons for
fluctuations
in marriage
rate.

394. The numbers in the last column but two, and those in the last column, show such a falling-off that, if the proportion that marriages bear to the total population or to the number of single females were to be accepted as an index of the prosperity of the community, an alarming amount of depression would be indicated. The figures in the last column but one, however, tell a very different tale, and exhibit just such fluctuations as might have been expected from the changes which took place in the circumstances of the population between the different periods. Thus, in 1854, there was a very large influx to the colony of single adult males, some of whom brought capital with them, which they saw, or thought they saw, every prospect of speedily increasing, whilst others actually did make money very quickly, and, consequently, the proportion who married was high, but, doubtless, not so high as it would have been had it not been for the discomfort of living in tents and other privations incident to a life on the early gold-fields, to which a large portion of the community was then subjected. By 1857 immigration had for the time been overdone, the result being that the gold obtained was very much less in proportion to the number of miners at work than it had been, whilst the discomforts of a gold-fields life were as great as ever, and so the rate naturally declined. By 1861 the yield of gold had seriously diminished, and as persons had not yet turned, to any great extent, to other pursuits, much distress was experienced, and the rate fell to a minimum. By 1871, and in a greater degree by 1881, a large proportion of the population had settled on farms, whilst some, unable to obtain congenial occupation, had left the colony; tents had almost disappeared from the gold-fields; the miners were, for the most

* The populations in this table are those returned at the respective censuses, the Chinese and Aborigines being excluded; and the marriages are those (exclusive of marriages of Chinese and Aborigines) which took place in the twelve months of which the date of each census was the middle. The proportions of the latter to the former, therefore, differ slightly from those in the previous table, which are based upon the total mean population and all the marriages in the calendar year.

† Comprising bachelors of 20 and upwards, and widowers at all ages.

‡ Comprising spinsters of 15 and upwards, and widows at all ages.

part, working for wages, and did not, as formerly, rush about from place to place; manufactures had been started, and had made considerable progress, and, accordingly, the rate improved. In 1871 the marriage rate was higher than at any previous period of the colony's history, and in 1881 it was still higher than in 1871.

395. The decline in the female marriage rate shown in the last column of the table will be better realized when it is considered that in 1854 about 1 in 4 of all the spinsters and widows in the colony married in the year—which proportion, three years after, had fallen to 1 in 6; four years later it had fallen to 1 in 8; ten years still later it had fallen to 1 in 14; and ten years later, viz., in 1881, it had reached the exceedingly low point of 1 in 21. The tide has probably now turned; the youthful native-born male population is growing up to manhood, and is commencing to fill the gap in early adult life caused by the passing on to later periods of the immigrants who, at the time of the discovery of the first gold-fields, came to Victoria unaccompanied by persons at younger ages who should supply their places as they passed onward or disappeared altogether from the scene; and it may be expected that, if the colony continues to enjoy a fair amount of prosperity, the marriages will increase in proportion to the available females, as they have already done in proportion to the available males.

Probability of female marriage rate reviving.

396. M. Toussaint Loua, Chief of the General Bureau of Statistics of France, in a paper read before the Statistical Society of Paris on the 17th December, 1884, pointed out the desirability of ascertaining the marriage rate by comparing the marriages with the number of marriageable persons instead of with the total population,* and states that in France marriageable males marry at the annual rate of 57 per 1,000, and marriageable females at that of 46 per 1,000. In a former paper (September, 1884,) the same writer had stated the proportions in Switzerland were respectively 49 and 38. The proportions in Victoria, according to the lowest line of the last table were 57 and 48. M. Loua does not say what ages he considers marriageable, and perhaps they may not be identical with those so considered by the Government Statist of Victoria—viz., 20 and upwards for males, and 15 and upwards for females.

French marriage rate.

397. The following table gives a statement of the number of marriages to every 1,000 of the population of the various Australasian

Marriage rates in Australasian colonies.

* The following are M. Loua's words:—"Si l'on veut rendre compte de la fréquence réelle des mariages, le rapport à la population ne suffit pas; il vaut mieux mettre les mariages en parallèle avec la population *mariable*, c'est à dire avec le nombre des individus célibataires ou veufs) ayant atteint ou dépassé l'âge requis pour leur mariage."—*Journal de la Société de la Statistique de Paris*, vingt-sixième année, p. 13, Berger Levrault, 5 Rue des Beaux Arts, Paris.

colonies for each year from 1865 to 1883, except Western Australia, for which colony it is given for the last twelve of those years :—

MARRIAGE RATES IN AUSTRALASIAN COLONIES, 1865 TO 1883.*

Year.	Number of Marriages † per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865 ...	7·36	8·90	13·27	9·45	...	6·27	10·47
1866 ...	6·76	8·22	11·61	8·12	...	5·93	10·32
1867 ...	6·97	7·79	9·54	8·20	...	6·10	9·69
1868 ...	7·08	8·17	8·33	7·37	...	6·57	9·35
1869 ...	6·89	7·98	8·31	6·78	...	6·44	8·32
1870 ...	6·63	7·79	7·80	6·90	...	6·62	7·62
1871 ...	6·37	7·73	8·06	6·77	...	5·90	7·15
1872 ...	6·36	7·42	8·70	7·20	5·56	6·17	6·85
1873 ...	6·50	7·97	9·66	8·00	6·25	6·36	7·91
1874 ...	6·33	7·59	8·62	8·00	6·96	6·83	8·87
1875 ...	6·33	7·73	8·63	8·01	7·26	6·63	8·94
1876 ...	6·21	7·49	7·57	8·49	7·07	7·13	8·25
1877 ...	6·31	7·73	7·57	8·66	6·38	7·79	7·63
1878 ...	6·20	7·84	6·98	9·47	6·50	7·96	8·03
1879 ...	5·98	7·55	7·49	8·81	7·57	7·23	7·60
1880 ...	6·22	7·72	6·97	8·69	7·42	7·38	6·71
1881 ...	6·79	8·24	7·71	8·33	6·60	7·30	6·65
1882 ...	7·08	8·69	8·56	8·73	7·07	8·03	7·07
1883 ...	7·38	8·78	8·93	8·49	6·95	9·01	6·82
Means ...	6·62	7·96	8·65	8·13	6·80	6·86	8·12

Reasons for marriage rates being higher in other colonies than in Victoria.

398. It will be observed that the mean marriage rate is lower in Victoria than in any one of the neighbouring colonies, and as, during the whole period over which the calculations extend, Victoria has certainly been second to none of the other colonies in point of wealth and prosperity, this may create surprise in the minds of those who fail to realize the fact that marriage rates, calculated upon the total population, do not afford an indication of the amount of prosperity in a community so much as of the proportion which single men at marriageable ages bear to the population as a whole. In civilized countries, the age at which four-fifths of the males who marry enter the marriage state is between 20 and 35 years. It naturally follows, therefore, that on the number of males at such ages the number of marriages mainly depends. Prior to the taking of the last census it was mentioned as probable that there had been a falling-off in the male population of Victoria at those ages; and, as was anticipated, the census disclosed the fact that Victoria had,

* For the number of marriages in the various colonies during the eleven years ended with 1883, see General Summary of Australasian Statistics (third folding sheet) *ante*.

† The numbers doubled give the *persons* married per 1,000 of the population.

in proportion to the total population, a smaller number of males between 20 and 40 than any of the other colonies.* The explanation of the higher proportion in the other colonies of males at the period named is to be found mainly in the fact that they—especially New South Wales, Queensland, South Australia, and New Zealand—have, for years past, introduced large numbers of adults at the cost of the State, and, as is nearly always the case when immigration is subsidized, these have been accompanied or followed by a steady stream of unassisted immigrants. Besides, not one of the neighbouring colonies has been subjected, in the early years of its history, to so large an influx of adult male immigrants unaccompanied by persons at younger ages, followed by a cessation of immigration, as has taken place in Victoria at and since the time of the early gold discoveries. As the young population is growing to a marriageable age, however, this colony is rapidly assuming a normal condition; and this circumstance is already bringing about an improvement in the marriage rate, which, with perhaps occasional brief interruptions, will assuredly continue until marriages bear as high a proportion to the total population as they do in any of the neighbouring colonies.

399. In 1883 the marriage rates in all the colonies except New Zealand compare very favorably with those in previous years, but especially those in Victoria, New South Wales, Queensland, and Tasmania; thus in Victoria and Tasmania the rates were the highest recorded in the nineteen years named in the table; in New South Wales the rate was the highest in the last eighteen, and in Queensland it was the highest—with one exception—in the last sixteen, years. The increase in the marriage rate in Tasmania—where the average rate is comparatively low—during the last two years is most striking; for whilst in 1881 and the two previous years it was only a little above 7 per 1,000, it rose in 1882 to 8 per 1,000, and in 1883 to 9 per 1,000—the latter being a very exceptional rate, even in those colonies where high marriage rates usually prevail. In New Zealand, on the other hand, the rate, which, a few years since, was higher than in any other Australasian colony, has latterly declined, and in the last two years has been so low as to cause that colony to occupy the lowest position on the list. This is a remarkable instance of a high marriage rate coincident with an influx of adult immigrants, and a low one consequent upon such influx being stopped.†

Comparison
of marriage
rates of
colonies
in 1883 and
former
years.

* See figures following paragraph 108 *ante*.

† Such an event was foreshadowed by the present writer in a paper read by him before the Melbourne Social Science Congress on the 25th April, 1880, in the following words:—"A depression in the marriage rate, it may be anticipated, will before long overtake several of the neighbouring colonies wherein marriages now bear a high proportion to the population, but which proportion must inevitably decline upon the cessation of the stream of adult immigrants which now flows towards their shores."

400. The following is the order of the colonies in reference to their respective marriage rates in the last year shown in the table and according to the average of the whole period of nineteen years :—

Order of colonies in respect to marriage rates.

- Order in 1883.
1. Tasmania.
 2. Queensland.
 3. New South Wales.
 4. South Australia.
 5. Victoria.
 6. Western Australia.
 7. New Zealand.

- Order in a Series of Years.
1. Queensland.
 2. South Australia.
 3. New Zealand.
 4. New South Wales.
 5. Tasmania.
 6. Western Australia.
 7. Victoria.

401. It will be noticed that Victoria, which for some years had been at the bottom, stood in 1883 above Western Australia and New Zealand; also that Tasmania, which, until recently, occupied only the fifth position, was, in 1883, at the head of the list.

Positions of colonies as regards marriage rates.

402. The following table shows the number of marriageable men and women in each Australasian colony according to the returns of the census of 1881. The Chinese and Aborigines are excluded in all the colonies, and the unmarried (never married) are distinguished from the widowed :—

Single men and women in Australasian colonies.

MARRIAGEABLE MEN AND WOMEN IN EACH AUSTRALASIAN COLONY, 1881.

Colony.	Exclusive of Chinese and Aborigines.*					
	Marriageable Men.			Marriageable Women.		
	Bachelors aged 20 and upwards.	Widowers at all Ages.	Total.	Spinsters aged 15 and upwards.	Widows at all Ages.	Total.
Victoria	87,071	12,796	99,867	97,667	21,711	119,378
New South Wales	90,597	9,848	100,445	68,206	16,064	84,270
Queensland	26,177	2,237	28,414	14,420	3,077	17,497
South Australia	29,365	2,790	32,155	26,711	5,860	32,571
Western Australia	4,858	539	5,397	2,501	508	3,009
Total	238,068	28,210	266,278	209,505	47,220	256,725
Tasmania	11,089	2,378	13,467	12,733	2,974	15,707
New Zealand	60,123	4,964	65,087	37,126	7,296	44,422
Grand Total	309,280	35,552	344,832	259,364	57,490	316,854

403. It will be observed that there were more bachelors in New South Wales than in Victoria, and thus, although widowers in the latter were more numerous than in the former, the whole number of marriageable men was greater in New South Wales than in this colony.

Victoria and New South Wales compared.

* In Queensland, South Sea Islanders are excluded as well as Chinese and Aborigines.

404. Victoria, Tasmania, and South Australia are the only colonies in which the marriageable women exceeded the marriageable men. The following are the proportions of the former to the latter, the colonies being arranged in order:—

Proportion of single women to single men.

SINGLE WOMEN PER 10,000 SINGLE MEN LIVING IN EACH COLONY, 1881.

1. Victoria ...	11,954	5. New Zealand ...	6,825
2. Tasmania ...	11,664	6. Queensland ...	6,158
3. South Australia ...	10,135	7. Western Australia ...	5,575
4. New South Wales ...	8,390		

405. The following figures show the proportion of marriages in each colony during the census year to the total population, exclusive of Chinese and Aborigines. In consequence of these exclusions, the figures necessarily differ somewhat from those given for 1881 in the table following paragraph 397 *ante*, and the positions of Queensland and South Australia are reversed; those of the other colonies, however, remaining unchanged:—

Marriage rates in census year

MARRIAGES* PER 1,000 OF THE POPULATION† OF EACH COLONY, 1881.

1. New South Wales ...	8.50	5. Victoria ...	6.94‡
2. Queensland ...	8.42	6. New Zealand ...	6.76
3. South Australia ...	8.37	7. Western Australia ...	6.66
4. Tasmania ...	7.45		

406. Comparing the marriages with the marriageable men, which is the most correct way of computing the marriage rate, South Australia—essentially an agricultural community §—stood first in 1881, and Western Australia last, the proportion in the latter being little more than half that in the former. In this respect Victoria occupied the fifth position, as in the case of the marriage rate calculated upon the whole population:—

Proportion marriages to single men

MARRIAGES PER 1,000 MARRIAGEABLE MEN LIVING IN EACH COLONY, 1881.

1. South Australia ...	71.78	5. Victoria ...	59.04‡
2. Tasmania ...	63.56	6. New Zealand ...	50.41
3. New South Wales ...	62.56	7. Western Australia ...	36.50
4. Queensland ...	59.94		

* The marriages in 1881 numbered as follow in the different colonies:—Victoria, 5,896; New South Wales, 6,284; Queensland, 1,703; South Australia, 2,308; Western Australia, 197; Tasmania, 856; New Zealand, 3,281. It has not been possible to eliminate the marriages of Chinese and Aborigines, as they are not kept separate in any of the colonies except Victoria. Their numbers, however, are but few.

† Exclusive of Chinese and Aborigines. The following are the numbers:—Victoria, 849,438; New South Wales, 739,620; Queensland, 202,296; South Australia, 275,724; Western Australia, 29,563; Tasmania, 114,861; New Zealand, 484,929.

‡ These proportions differ slightly from those given in the table following paragraph 393 *ante*, where the comparisons are made with the marriages which took place in the twelve months of which the census was at the middle, instead of the calendar year 1881, which has here been adopted uniformly for all the colonies. The marriages also in the former table were exclusive of those of Chinese and Aborigines, which is not the case here.

§ According to the latest returns, South Australia had over 9 acres in cultivation per head of the population, or three times as much per head as any other Australasian colony. Tasmania stood next to South Australia with 3 acres per head.

Proportion of
marriages
to single
women.

407. According to the census, women would appear to have a smaller chance of getting married in Victoria than in any other Australasian colony, as the proportion of marriages to those of them who were marriageable was found to be much lower here than in any of the other colonies. The colony which stood highest in this respect was Queensland, where nearly 1 in 10 of the single women married in the year, or about twice the proportion obtaining in Victoria :—

MARRIAGES PER 1,000 MARRIAGEABLE WOMEN LIVING IN EACH COLONY, 1881.

1. Queensland	... 97·33	5. Western Australia...	65·47
2. New South Wales	... 74·57	6. Tasmania...	... 54·50
3. New Zealand	... 73·86	7. Victoria ...	... 49·39*
4. South Australia	... 70·86		

Marriage
rates in
Australia
and Aus-
tralasia.

408. In 1883 the marriage rate of the colonies situated upon the Australian continent was higher than in any of the other years named in the following table, and, notwithstanding the decline in the marriage rate experienced in New Zealand, which has been already referred to,† this was also the case as regards the continental colonies with the addition of that colony and Tasmania :—

MARRIAGE RATES IN AUSTRALIA AND AUSTRALASIA,
1873 TO 1883.

Year.	Number of Marriages † per 1,000 of Mean Population.	
	Continent of Australia.	Australia with Tasmania and New Zealand.
1873	7·35	7·38
1874	7·07	7·32
1875	7·12	7·38
1876	6·93	7·15
1877	7·05	7·18
1878	7·08	7·27
1879	6·88	7·01
1880	7·15	7·08
1881	7·62	7·41
1882	8·02	7·86
1883	8·19	7·99
Means	7·32	7·36

Unmarried
and married
males, 1881
and 1884.

409. By direction of the Honorable the Minister of Defence, an estimate was recently made by the Government Statist of the number of unmarried males between 18 and 35 and between 35 and 50 years of

* See footnote (‡) to preceding page.

† See paragraph 399 *ante*.

‡ The numbers doubled give the *persons* married per 1,000 of the population.

age, and of the number of married males between 18 and 50 years of age, living in Victoria at the middle of 1884, and these, in the following table, are compared with the numbers of like ages and conjugal conditions as returned at the census of 1881:—

UNMARRIED AND MARRIED MALES IN VICTORIA IN 1881 AND 1884.

Year.	All Conjugal Conditions, 18 to 50.	Unmarried (including Widowers).			Married, 18 to 50.
		18 to 35.	35 to 50.	Total, 18 to 50.	
1881 ...	187,842	80,003	25,111	105,114	82,728
1884 ...	217,336	103,250	19,876	123,126	94,210
Increase ...	29,494	23,247	...	18,012	11,482
Decrease ...	...	...	5,235	...	...

410. The table shows an estimated increase in the $3\frac{1}{4}$ years between the taking of the census and the middle of 1884 of nearly 30,000 males between 18 and 50, of whom 11,482, or two-fifths, were married. The unmarried between 18 and 35 increased by 23,247, but between 35 and 50 they were fewer by 5,235, the net increase of unmarried males between 18 and 50 being 18,012. Increase in $3\frac{1}{4}$ years.

411. Returns of marriages, births, and deaths are obtainable for few British colonies outside of Australasia. The following are the marriage rates in those colonies—which, it is to be regretted, are, for the most part, of only minor importance—for which such particulars have come to hand, or can be gathered from their official reports. The low rate in Barbadoes is explained by the fact that the negro population as a rule ignore the marriage ceremony. The same circumstance, to a greater or less extent, doubtless also affects the marriage rate in Trinidad, and perhaps also in the Mauritius, although the low marriage rate in the latter would, to a certain extent, be accounted for by the fact that the large imported Cooly population is for the most part comprised of males, the females introduced being extremely few:— Marriage rates in certain British possessions.

MARRIAGE RATES IN CERTAIN BRITISH POSSESSIONS.

	Years.	Annual Rate per 1,000 of the Population.*		Years.	Annual Rate per 1,000 of the Population.*
Ceylon ...	1867-76	7.3	West Indies—		
Mauritius ...	1871-75	2.5	St. Vincent	1872-76	6.3
Seychelles ...	1875-77	8.7	Barbadoes ...	1872-77	3.7
Bermudas ...	1871-75	8.3	Grenada ...	1871-75	5.6
West Indies—			Dominica ...	1871-75	6.9
St. Lucia ...	1878-79	5.2	Trinidad ...	1871-75	3.8

* The numbers doubled give the persons married per 1,000 of the population.

412. The following table gives for each of the fifteen years ended with 1882 a statement of the marriage rates in British and such Foreign countries as the information is available for. The figures have been taken from the reports of the Registrar-General of England:—

MARRIAGE RATES IN EUROPEAN COUNTRIES, 1868 to 1882.

Year.	Number of Marriages * per 1,000 of Mean Populations.														
	England and Wales.	Scotland.	Ireland.†	Denmark.	Sweden.	Norway.	Austria.	Hungary.	German Empire.‡	Belgium.	The Netherlands.	France.	Switzerland.	Spain.	Italy.§
1868 ...	8.1	6.7	5.1	7.3	5.5	...	9.3	13.7	8.8	7.3	7.7	7.9	6.7	6.7	7.2
1869 ...	8.0	6.7	5.0	7.4	5.7	...	10.4	11.0	8.9	7.4	7.8	8.2	7.2	8.1	8.0
1870 ...	8.1	7.2	5.3	7.4	6.6	...	9.7	9.8	7.4	7.0	7.9	6.0	7.0	6.3	7.3
1871 ...	8.4	7.1	5.4	7.3	6.5	6.7	9.5	10.4	8.0	7.4	8.0	7.2	7.3	...	7.5
1872 ...	8.8	7.5	5.0	7.5	7.0	7.0	9.2	10.8	10.3	7.8	8.2	9.8	7.8	...	7.5
1873 ...	8.8	7.8	4.8	8.1	7.3	7.2	9.3	11.3	10.0	7.8	8.5	8.9	7.6	...	7.9
1874 ...	8.6	7.6	4.6	8.2	7.3	7.7	9.0	10.7	9.6	7.6	8.3	8.3	8.3	...	7.6
1875 ...	8.4	7.4	4.5	8.5	7.0	7.9	8.5	11.0	9.1	7.3	8.3	8.4	9.0	...	8.4
1876 ...	8.4	7.5	5.0	8.5	7.1	7.7	8.2	9.9	8.5	7.2	8.2	7.9	8.1	...	8.1
1877 ...	7.9	7.2	4.6	8.1	6.9	7.5	7.4	9.1	8.0	6.9	8.0	7.6	7.9	...	6.8
1878 ...	7.6	6.8	4.7	7.4	6.5	7.3	7.5	9.3	7.7	6.7	7.7	7.6	7.4	...	7.1
1879 ...	7.2	6.4	4.3	7.3	6.3	6.8	7.6	10.2	7.5	6.7	7.6	7.6	6.9	...	7.5
1880 ...	7.4	6.6	3.8	7.6	6.3	6.7	7.5	9.1	7.5	7.1	7.5	7.5	6.8	...	6.9
1881 ...	7.6	6.9	4.2	7.8	6.2	6.4	8.0	9.9	7.5	7.2	7.3	7.5	6.8	...	8.1
1882 ...	7.7	7.0	4.3	7.7	6.4	6.7	8.2	10.2	7.7	7.0	7.2	7.4	6.8	...	7.9
Means	8.0	7.1	4.7	7.7	6.6	7.1	8.6	10.5	8.5	7.2	7.9	7.9	7.4	7.0	7.6

413. It will be observed that Italy was the only country whose marriage rate was above the average in the years 1881 and 1882, but that the rates in England, Scotland, Denmark, Austria, and Belgium, as well as Italy, show improvement in those years as compared with the universally low rates prevailing in 1879 and 1880. In most of the other countries, however, the depression in the marriage rate has continued, although in some cases there are indications of a reaction. It may be remarked that in England the marriage rates were lower in 1879 and 1880 than in any other year since the registration system first came into force.

* The numbers doubled give the *persons* married per 1,000 of the population.

† The low marriage rate in Ireland is partly attributed to defective registration, particularly as regards Roman Catholic marriages, which amount to over 70 per cent. of the whole. It is also stated to be in part due to "the abnormal conditions arising from a large annual emigration of unmarried persons at what may be called the marrying ages."—See 15th Detailed Report of the Registrar-General of Ireland, page 6.

‡ The figures for the years from 1868 to 1871 refer to Prussia only.

§ In Italy, the civil became the only legal form of marriage in 1866, and a low rate was recorded in that and subsequent years in consequence of the non-registration of marriages solemnized only in churches. The number of such marriages, however, afterwards decreased, and since then the registration of marriages has been less imperfect.

414. The mean marriage rate in Central Europe, as shown by the figures for Hungary, Germany, and Austria, is much higher than in the other portions; whilst the rates in England and Wales and in France and Holland come next. The rates in these countries vary from 8 to 10½ per 1,000 of the population. The lowest rates prevail in Ireland* and Sweden. In four of the Australasian colonies, viz., Queensland, New Zealand, South Australia, and New South Wales, the mean marriage rate, during the nineteen years ended with 1883 was either at or above 8 per 1,000, the rate in the first three being somewhat higher than, and in the last about the same as, in England, Holland, and France. The average rates in Tasmania and Western Australia are slightly higher than, and the rate in Victoria is about the same as, the rate in Sweden, which is, as has been already stated—next to Ireland—at the bottom of the list of European countries in this respect.

Australasian and European marriage rates compared.

415. The following, according to the reports of the Registrar-General of England, is the marriage rate of the United Kingdom during the twelve years ended with 1882. If, however, the registrations in Ireland are defective, as is alleged,* some disturbance to the calculations must result therefrom. It will be observed that the rate in 1882, although higher than the unusually low rates which had prevailed in the three previous years, was still below the average of the whole period:—

Marriage rate in United Kingdom.

MARRIAGE RATE IN THE UNITED KINGDOM, 1871 TO 1882.

		Marriages per 1,000 of the Population.				Marriages per 1,000 of the Population.	
1871	8·21	1878	...	...	7·09
1872	7·98	1879	...	...	6·69
1873	8·03	1880	...	...	6·83
1874	7·79	1881	...	...	7·01
1875	7·67	1882	...	...	7·17
1876	7·70		Mean	...	7·46
1877	7·32				

416. Although rural rather than urban life tends to the promotion of marriage, it happens that, since the marriage ceremony is generally performed in towns, whatever may be the ordinary residence of the persons marrying, the marriage rate recorded there is much higher than that in the country. In 1884 it was in town districts over three times as high as in rural districts, as will be seen by the following table, which contains a statement of the marriages celebrated in that year in the three classes of districts, together with the estimated mean populations of such divisions:—

Marriage rates in town and country.

* See footnote (f) to table following paragraph 412 ante.

MARRIAGES IN URBAN AND COUNTRY DISTRICTS, 1884.

Districts.	Estimated Mean Population.	Marriages, 1884.	
		Total Number.	Number per 1,000 of the Population.
Melbourne & suburbs (Greater Melbourne)	322,690	3,630	11.25
Extra-Metropolitan towns	190,636	2,123	11.14
Country districts	432,774	1,465	3.39
Total	946,100	7,218	7.63

417. Marriages in Victoria are generally most numerous in the autumn quarter, next in the spring quarter, next in the summer quarter, and least numerous in the winter quarter, and 1884 was no exception to this rule. The following table shows the number and percentage of marriages in each quarter of that year and the mean percentage in each quarter of a previous decade :—

MARRIAGES IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1884.		Percentage in Ten Years: 1871 to 1880.
		Number of Marriages.	Percentage.	
Summer ...	March	1,663	23.04	24.43
Autumn ...	June	1,963	27.20	26.19
Winter ...	September	1,658	22.97	23.81
Spring ...	December	1,934	26.79	25.57
	Year	7,218	100.00	100.00

418. About four-fifths of the unions which take place are between bachelors and spinsters; and the next most numerous are generally those between widowers and spinsters, although they have sometimes been exceeded by marriages between bachelors and widows. Marriages between widowers and widows are generally somewhat less than a twentieth of the whole. In 1884 the proportion of marriages between bachelors and spinsters was much above the average, and a corresponding decrease occurred amongst the other classes, chiefly in the marriages of bachelors and widows. The following are the number and percentage in each of these groups during 1884 and the percentage during a previous decennial period :—

Marriages in each quarter.

Former condition of those marrying.

FORMER CONDITION OF PERSONS MARRIED.

Previous Condition.	Year 1884.		Percentage in Ten Years : 1871 to 1880.
	Number of Marriages.	Percentage.	
Bachelors and spinsters	6,152	85.23	80.59
Bachelors and widows	341	4.72	7.10
Widowers and spinsters	451	6.25	7.75
Widowers and widows	274	3.80	4.56
Total	7,218	100.00	100.00

419. The following is a statement of the proportions of marriages of persons of different conjugal conditions in various countries, the figures, except those in the first line, being taken from *Mulhall's Dictionary of Statistics** :—

Former condition of those marrying in various countries.

FORMER CONDITION OF PERSONS MARRYING IN DIFFERENT COUNTRIES.

Countries.	Per 1,000 Marriages Celebrated, Number between—			
	Bachelors and Spinsters.	Bachelors and Widows.	Widowers and Spinsters.	Widowers and Widows.
Victoria	806	71	77	46
England	816	45	86	53
France	840	41	82	37
Prussia	794	53	108	45
Russia	762	46	102	90
Austria	755	64	131	50
Italy	825	38	99	38
Spain	811	40	101	48
Belgium	827	51	86	36
Holland... ..	794	54	104	48
Denmark	813	52	101	34
Sweden	847	36	93	24
Norway... ..	845	38	96	21
Greece	858	41	68	33
Roumania	850	30	62	58

420. The figures in this table appear to show that widows have a better chance of remarrying in Victoria than in most of the countries named, as the proportion of such remarriages (117 per 1,000) is higher than in any of those countries, except Russia (136 per 1,000). Next to these countries in this respect is Austria with 114, then Holland with 102, and then England and Prussia each with 98 remarriages of widows to every 1,000 marriages celebrated.

High proportion of widows remarrying.

421. Divorced persons marrying are classed as bachelors and spinsters, unless in cases where they had become widowers or widows before contracting the marriage from which they were released by

Divorced persons, 1884.

divorce. Twelve divorced men and two divorced women were married in 1884; ten of the former married spinsters, and two widows. The divorced women both married bachelors. There were also two marriages by registrar of persons who had been previously married to each other; but no statement was made as to whether they had been divorced or what was the reason of their remarriage.

Divorced
persons,
1881.

422. The persons returned at the census of 1881 as living in a state of divorce numbered 19, viz., 9 males and 10 females. Of the former, 4 were farmers or gardeners, 1 was a merchant, 1 a shopkeeper, 1 a cabinetmaker, 1 a bootmaker, and 1 a maltster. Of the females, 1 was an innkeeper, 1 a farmer, 1 a tailoress, 1 a needlewoman, 1 of independent means, 2 were washerwomen, and 3 were merely performing domestic duties.*

Deserted
husbands
and wives.

423. Persons whose wives or husbands have not been heard of for a period of seven years may marry again without rendering themselves liable to be prosecuted for bigamy; but such unions are subject to the serious disadvantage that the issue by the second marriage would be illegitimate, and the marriage itself void, if it should turn out that the first husband or wife was alive at the time thereof. Thirteen deserted wives (but no deserted husbands) availed themselves of this provision in 1884. Nine of these married bachelors, and four widowers; three had not heard of their former husbands for 7 years, one for 8, two for 9, three for 10, and the remainder for 12, 16, 20, and 25 years respectively. In the previous year two deserted wives remarried.

Remarriages.

424. In 1884, 725 widowers and 615 widows re-entered the marriage state. During the last eleven years more widowers have remarried than widows. Formerly it was different. In the eight years ended with 1873 the widowers re-entering the marriage state numbered 4,344, and the widows 4,618, and at earlier periods in the history of the colony the preponderance of remarriages of widows over those of widowers was even greater than this. Such a preponderance would be likely to happen only in a country in which females are much less numerous than males; and the fact of the reverse having been the case of late years would afford indirect proof, if such were needed, that the proportion of marriageable females to marriageable males in the population has increased, a circumstance which was made evident by the results of the last census.† In England and Wales, during the twenty years ended with 1874, 48 per cent. more widowers remarried than widows, the

* For further particulars respecting these divorced persons, see General Report on the Census of 1881, paragraph 314.

† According to the census returns, there were in Victoria, in 1881, nearly 120 marriageable females to every 100 marriageable males.—See table following paragraph 402, also figures following paragraph 404, ante.

number of the former being 490,912, that of the latter 332,428. The following is a statement of the number of widowers and widows who remarried in Victoria during each of the nineteen years ended with 1884 :—

REMARRIAGES, 1866 TO 1884.

Year.	Number of Remarriages of—		Year.	Number of Remarriages of—	
	Widowers.	Widows.		Widowers.	Widows.
1866 ...	487	498	1877 ...	666	600
1867 ...	504	591	1878 ...	634	585
1868 ...	558	623	1879 ...	637	553
1869 ...	553	563	1880 ...	603	520
1870 ...	547	595	1881 ...	679	551
1871 ...	587	605	1882 ...	628	547
1872 ...	522	552	1883 ...	699	562
1873 ...	586	591	1884 ...	725	615
1874 ...	602	593			
1875 ...	614	583	Total ...	11,509	10,950
1876 ...	678	623			

425. The marriages of 9 Aboriginal males with Aboriginal females are included in the returns of 1884. In the previous year 4 such marriages took place. Marriages of
Aborigines.

426. Nineteen Chinese males were married in Victoria in the year 1884, as against 8 in 1883, 10 in 1882, 4 in 1881, 13 in 1880, 11 in 1879, 13 in 1878, and 20 in 1877. During the eighteen years prior to the year under review, 276 Chinamen were married in Victoria, or an average of about 15 per annum. The following table shows the nationalities of the women who formed matrimonial unions with Chinese during that period, also during the year under review :— Marriages of
Chinese.

NATIONALITY OF WOMEN MARRYING CHINESE, 1866 TO 1884.

Birthplace of Wives.	Number of Marriages of Chinese Males.		
	Eighteen Years: 1866 to 1883.	Year 1884.	Total: 1866 to 1884.
Victoria	124	14	138
Other Australian colonies ...	46	3	49
England and Wales	52	1	53
Scotland	15	...	15
Ireland	24	...	24
Other British possessions ...	1	...	1
France	1	...	1
Germany	2	...	2
Spain	1	...	1
The United States	1	1	2
China	4	...	4
At sea	5	...	5
Total	276	19	295

Marriages
by different
sects.

427. The marriage ceremony in Victoria may be performed either by the registered clergy of any religious sect or by lay registrars. In 1884, 91 per cent. of the marriages were celebrated according to the former, and 9 per cent. according to the latter, system. Lay marriages, which had fallen off considerably in 1882 and 1883, again rose in 1884, when they were more numerous than in any previous year except 1881; they numbered 645, as against 565 in 1883, 588 in 1882, and 647 in 1881. The following table gives a statement of the number and percentage of marriages celebrated by each religious sect and by lay registrars during 1884, also the percentage in the preceding year and in the ten years ended with 1880:—

MARRIAGES BY DIFFERENT DENOMINATIONS.

Marriages performed according to the usages of the—	Marriages in 1884.		Percentage of Marriages in—	
	Number.	Percentage.	1883.	Ten Years: 1871-80.
Church of England	2,132	29·54	27·99	24·63
Presbyterians	1,242	17·20	19·10	20·46
Wesleyans	1,138	15·77	15·46	16·38
Bible Christians	141	1·95	1·96	1·69
Independents	354	4·90	5·01	5·42
Baptists	313	4·34	4·83	3·70
Lutherans	73	1·01	·89	1·02
Unitarians	1	·01	·01	·02
Society of Friends ... ..	...	...	...	·01
Calvinistic Methodists	2	·03	·03	·16
Roman Catholics	1,061	14·70	14·86	17·21
Jews	36	·50	·40	·42
Other sects	80	1·11	1·12	1·06
Lay registrars	645	8·94	8·34	7·82
Total	7,218	100·00	100·00	100·00

Duplicate
marriages.

428. It should be mentioned that, occasionally, a marriage is performed twice over, viz., by a lay registrar and a clergyman, or by clergymen of two different denominations. In 1884 one case was noticed of a marriage according to Jewish rites of a couple who had previously been united by a lay registrar. It is not always easy to detect these cases in the registers, but the circumstance occurs too seldom to cause any serious disturbance in the marriage statistics.

429. Of the 9 Aboriginal marriages which took place in 1884, 7 were solemnized according to the rites of the Moravians, 1 was according to those of the Wesleyans, and 1 according to those of the Baptists. Sects of
Aboriginals
married.

430. Of the 19 marriages of Chinese in 1884, 3 were celebrated according to the rites of the Church of England, 2 according to those of the Presbyterians, 3 according to those of the Wesleyans, 5 according to those of the Independents, 2 according to those of the Primitive Methodists, and 4 were performed by lay registrars. Sects of
Chinese
married.

431. The returns of the census of 1881 afford an opportunity of comparing the number of marriages performed according to the rites of each particular denomination with the numbers of that denomination in the population; and by taking the mean of the returns of that census and the preceding one, and of the marriages which were performed in the interval which elapsed between the two censuses, the same information is obtained extending over a period of ten years. The result is given in the following table:— Marriages
by different
sects.

PROPORTION OF MARRIAGES TO NUMBERS OF EACH DENOMINATION.

Religious Denomination.	Persons of each Denomination 1881.	Marriages celebrated annually, 1880 to 1882.		Persons of each Denomination (mean of 1871 and 1881).	Marriages celebrated annually, 1871 to 1880.	
		Mean Number.	Proportion per 1,000 persons living.		Mean Number.	Proportion per 1,000 persons living.
Church of England ...	311,291	1,554·3	5·00	284,563	1,226·4	4·31
Presbyterians ...	132,591	1,107·0	8·35	122,787	1,018·6	8·30
Wesleyans ...	108,393	936·3	8·64	99,209	815·5	8·22
Bible Christians ...	6,660	117·3	17·57	5,427	84·0	15·48
Independents ...	19,878	286·3	14·40	19,034	269·8	14·17
Baptists ...	20,373	234·0	11·49	18,342	184·0	10·03
Lutherans ...	11,149	57·3	5·14	10,854	50·8	4·68
Unitarians ...	942	2·0	2·12	979	·9	·92
Society of Friends ...	282	...	...	308	·4	1·30
Calvinistic Methodists	712	6·3	8·85	1,072	8·2	7·65
Roman Catholics ...	203,480	828·3	4·07	187,050	856·8	4·58
Jews ...	4,330	24·0	5·54	3,950	21·1	5·34
Other sects ...	8,465	69·3	...	7,430	52·8	...
Residue ...	33,800*	607·7†	...	35,932*	389·1†	...
Total...	862,346	5,830·3	6·76	796,937	4,978·4	6·25

432. It will be observed that the denominations which solemnize most marriages in proportion to their numbers in the population are the Sects which
perform
most mar-
riages and
vice versa

* Including Pagans, those of no denomination and of no religion, and the unspecified.

† Marriages by lay registrars.

Bible Christian, the Independent, and the Baptist, in the order named. In all these cases the proportion in the three years of which the census year is the middle, viz., 1880 to 1882, was higher than that shown for the decennium. In proportion to their respective numbers, the marriages performed in the three years named according to the rites of the Church of England, the Lutherans, and the Jews were more numerous, and those according to the rites of the Wesleyans, Presbyterians, and Calvinistic Methodists were much more numerous, than those performed according to the rites of the Roman Catholic Church; but, according to the average of the decennium, more marriages were solemnized according to the rites of the Roman Catholic Church than according to those of the Church of England.

Signing with marks.

433. The numbers of either sex who evinced their want of elementary education by signing the marriage register with a mark instead of in writing were as follow in 1884, the proportion of those who signed with marks to the total numbers married being also shown:—

SIGNING MARRIAGE REGISTER WITH MARKS, 1884.

Persons Married.	Numbers Married.	Signing with Marks.	
		Total Number.	Number in every 100 Married.
Bridegrooms	7,218	184*	2·55
Brides	7,218	200	2·77
Mean	7,218	192	2·66

Increased numbers signing in writing.

434. In proportion to the total numbers married, a very satisfactory increase has taken place of late years in the number of both males and females signing the marriage register in writing. With few exceptions, a constant improvement has been apparent from year to year—nearly every year, as compared with its predecessor, showing a smaller proportion of persons signing with marks. In 1884, the proportion of both men and women signing with marks was much lower than in any previous year, as will be seen by the following figures, which show the proportions for the last twelve years:—

* Of these, 12 were Chinese, who signed in the Chinese character. If these be excluded, the number signing with marks in every 100 married would be reduced to 2·38.

NUMBERS SIGNING WITH MARKS PER 100 MARRIED,
1873 TO 1884.

Year.	Men.	Women.	Mean.
1873	6.55	9.97	8.26
1874	6.52	9.91	8.22
1875	5.48	9.43	7.46
1876	5.31	7.50	6.41
1877	5.04	6.02	5.53
1878	4.12	5.30	4.71
1879	3.81	5.60	4.71
1880	4.18	4.09	4.13
1881	2.90	4.16	3.53
1882	2.88	3.27	3.07
1883	3.09	3.47	3.28
1884	2.55*	2.77	2.66

435. A very much more decided improvement is shown by comparing these results with those of the twenty years prior to 1873, which embrace the whole period from 1853, when the registration system was inaugurated in Victoria, to the end of 1872. In this period, 86,062 marriages were registered, with the result that 7,902 of the bridegrooms and 17,824 of the brides signed the register with marks. These numbers give the following proportions as the average for the twenty years :—

NUMBERS SIGNING WITH MARKS PER 100 MARRIED,
1853 TO 1872.

Men.	Women.	Mean.
9.18	20.71	14.95

436. The marriages in which marks instead of writing were made use of in 1884 numbered 384, but in only 64 of these, or a sixth, did both parties use marks. In the 320 other instances either the husband or the wife signed in writing. Thus, whereas the marriages in which one or both could not write amounted to less than a twentieth of the whole, in the case of only about 1 in every 200 marriages could neither party write.

437. In the case of the 9 Aboriginal males, which took place in 1884, 4 of the males, but only 1 of the females, signed with marks.

438. The proportion of persons signing with marks is found to differ according to the religious denomination. Means are afforded by the following table of observing the position of the adherents of the different sects so far as the possession of a sufficient amount of rudimentary education to enable them to write their names is concerned. The figures are those of the year 1884 and the average of the ten years ended with 1880. Considerable improvement will be noticed in respect to all the principal sects :—

* See footnote to last page.

SIGNING WITH MARKS IN EACH SECT.

Marriages performed according to the usages of the—	Number Signing with Marks in every 100 Married.					
	Year 1884.			Ten Years: 1871 to 1880.		
	Men.	Women.	Mean.	Men.	Women.	Mean.
Church of England ...	1.50	1.69	1.59	4.54	6.11	5.33
Presbyterians ...	1.29	1.61	1.45	3.67	5.97	4.82
Wesleyans ...	1.93	1.93	1.93	} 4.15	5.33	4.74
Bible Christians ...	1.42	2.84	2.13			
Independents ...	2.54	2.26	2.40	3.37	5.49	4.43
Baptists ...	2.24	3.83	3.03	3.48	5.22	4.35
Lutherans ...	...	...	...	1.77	4.13	2.95
Calvinistic Methodists ...	...	...	...	1.22	6.10	3.66
Roman Catholics ...	5.28	4.62	4.95	10.14	15.43	12.79
Jews ...	...	...	...	.95	.47	.71
Other sects ...	5.13	2.56	3.84	7.01	3.79	5.40
Lay registrars ...	5.58	7.29	6.43	6.60	12.93	9.77
Total ...	2.55*	2.77	2.66	5.31	7.93	6.62

Roman Catholic and civil marriages.

439. It will be observed that the proportion of those signing with marks is higher amongst marriages performed according to the rites of the Roman Catholic Church than amongst those celebrated by any other religious denomination, but that the numbers in 1884 show a very considerable improvement as compared with the decennial period. The proportion so signing amongst civil marriages, although usually lower, was in the last two years considerably higher than amongst marriages by Roman Catholics.

Marriages by Unitarians, Calvinists, and Jews.

440. In 15 marriages by Unitarians which took place in the fourteen years ended with 1884, not one instance occurred of either of the parties signing with a mark; this sect, therefore, finds no place in the above table. In 98 marriages by Calvinistic Methodists, all but two of the males signed in writing, but 5 of the females signed with marks. In the 318 marriages of Jews only 3 persons signed with marks.

Signing with marks in Australasian colonies.

441. A statement of the numbers who sign the marriage register with marks is published in all the Australasian colonies except Western Australia and Tasmania, and from the figures given the following percentages for the seven years 1877 to 1883 have been deduced. The colonies are placed in order according to the state of education thus displayed, the colony with the smallest proportion signing with marks being placed first, and that with the reverse last:—

* See footnote to table following paragraph 433 ante.

SIGNING WITH MARKS IN AUSTRALASIAN COLONIES, 1877 TO 1883.

Colony.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
1. Victoria ...	1877	5.04	6.02	5.53
	1878	4.12	5.30	4.71
	1879	3.81	5.60	4.71
	1880	4.18	4.09	4.13
	1881	2.90	4.16	3.53
	1882	2.88	3.27	3.07
	1883	3.09	3.47	3.28
2. New Zealand ...	1877	3.95	8.54	6.25
	1878	2.96	6.85	4.90
	1879	3.31	6.41	4.86
	1880	2.77	5.38	4.08
	1881	3.20	6.79	4.99
	1882	2.50	4.97	3.73
	1883	2.91	4.62	3.76
3. South Australia ...	1877	6.14	7.89	7.01
	1878	5.09	7.00	6.04
	1879	6.48	6.93	6.70
	1880	5.19	6.81	6.00
	1881	4.37	6.85	5.61
	1882	4.43	5.14	4.78
	1883	4.02	5.36	4.69
4. New South Wales ...	1877	8.45	11.07	9.76
	1878	7.71	8.52	8.11
	1879	6.86	8.31	7.58
	1880	6.07	7.27	6.67
	1881	5.52	8.35	6.93
	1882	5.09	6.16	5.62
	1883	5.66	6.54	6.10
5. Queensland ...	1877	7.78	14.15	10.97
	1878	6.23	13.30	9.76
	1879	6.86	11.97	9.41
	1880	5.82	12.09	8.95
	1881	4.93	9.92	7.42
	1882	5.16	9.69	7.42
	1883	5.35	8.40	6.88

442. By these figures it appears that the proportion of persons able to sign in writing is almost always larger in this than in any other colony. Next to Victoria in this respect is New Zealand, in which, both in 1882 and 1883, the proportion of males signing in writing was even larger than in this colony. The colonies, generally, show improvement from year to year, and there is every reason to expect that in all the colonies, as the children educated under the compulsory systems

Victoria the least illiterate colony.

established arrive at marriageable ages, it will become a rare occurrence for a marriage to be attested otherwise than in writing.

Signing with marks in the United Kingdom.

443. No returns are at hand showing the manner in which the marriage registers are signed in British colonies other than those named. The following, however, taken from the reports of the Registrars-General, are the proportions using marks in England, Scotland, and Ireland:—

SIGNING WITH MARKS IN THE UNITED KINGDOM.

Country.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
England and Wales ...	1882	13·2	17·1	15·2
Scotland	1881	7·1	13·9	10·5
Ireland	1879	28·0	32·9	30·4

Illiteracy in United Kingdom and colonies compared.

444. From the figures it would seem that Scotland is before and Ireland much behind England in point of adult education, but that all are very far behind even the most backward of the Australasian colonies. In England, in 1882, the greatest proficiency amongst men was attained in the Westmoreland district, where the percentage signing with marks was only 5·7; but even this shows more illiteracy amongst males than was found to exist in the same year in any of the colonies referred to. As regards females, the highest state of proficiency prevailed in the Rutland district, where the percentage signing with marks was only 2·2, which proportion was lower than in any of the Australasian colonies.

Signing with marks in France.

445. The only other countries respecting which similar particulars are at hand are France and Italy, the particulars, moreover, not being of very late date. In France, according to the returns of 1877, illiteracy—by the marriage register test—is somewhat more prevalent amongst males, and very much more so amongst females, than in England and Wales, but in both cases is considerably less prevalent than in Ireland. In France, the proportions signing with marks in every 100 marriages during 1877 were—males, 18·52; females, 29·60; mean, 24·06. In Italy the proportion signing with marks in every 100 marriages during 1867 were—males, 21·6; females, 30·0, showing a larger proportion of illiteracy than in any of the other countries named, except Ireland.

446. The age of both bridegroom and bride was specified in the case of all but 98 of the 7,218 marriages which took place in 1884.* In 88 of the defective entries the age of neither party was given; in 4 cases the age of the husband was stated, but not that of the wife; and in 6 instances the age of the wife was given, but not that of the husband. The following table shows the ages of the husbands and of the wives in combination:—

Ages of bridegrooms and brides in combination.

AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION, 1884.

Ages of Bridegrooms.	Ages of Brides.															Total Bridegrooms.					
	Under 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	21 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.		60 to 65.	65 to 70.	70 to 75.	Unspecified.	
17 to 18 years...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2
18 to 19 "	...	...	...	1	4	2	2	4	...	...	...	...	...	...	...	...	...	...	...	15
19 to 20 "	1	...	...	5	5	11	2	13	...	...	...	...	...	...	...	...	...	...	...	37
20 to 21 "	...	1	4	6	13	23	16	51	7	...	...	...	...	...	...	...	...	...	...	121
21 to 25 "	...	6	31	66	137	222	285	1350	283	33	7	3	...	...	...	...	...	...	1	2424
25 to 30 "	1	2	17	44	99	143	211	1203	660	72	14	5	1	...	...	...	...	...	...	2472
30 to 35 "	1	1	7	9	19	40	45	334	270	90	28	3	1	...	...	...	...	...	1	849
35 to 40 "	5	6	7	16	124	132	72	53	8	8	1	1	433
40 to 45 "	2	4	4	5	39	79	48	35	31	10	3	260.
45 to 50 "	2	...	2	1	5	24	45	28	36	18	24	8	2	195
50 to 55 "	1	2	13	15	23	20	27	22	23	9	2	...	1	1	...	159
55 to 60 "	1	1	...	4	12	3	7	11	18	12	6	2	1	78
60 to 65 "	1	2	4	3	6	7	10	11	9	4	57
65 to 70 "	1	3	1	...	2	2	6	2	17
70 to 75 "	1	2	1	4
75 to 80 "	1	1
Unspecified	...	...	...	...	...	4	2	...	...	...	...	...	...	...	...	...	...	88	...	94
Total Brides	3	10	63	142	289	459	592	3162	1507	375	208	113	96	60	34	11	1	1	92	7218	

NOTE.—This table may be read thus:—Two men between 45 and 50 married girls between 16 and 17; three women between 40 and 45 married men between 21 and 25; &c.

447. An examination of the 7,120 cases in which the ages of both parties are specified will show that in 2,270 instances, or 32 per cent. of the whole, both parties to the marriage were about the same age; in 588 instances, or 8 per cent. of the whole, the wife was older than the husband; and in 4,262 instances, or 60 per cent. of the whole, the husband was older than the wife.

Relative ages of husband and wife.

448. Some striking inequalities of age amongst the parties married appear in several of the columns, as, for instance, a man between 75

Inequalities of age.

* There is no reason to suppose that in Victoria the age of either party to a marriage is often wrongly stated, and the cases in which the age is not specified are but few. It may, however, not be amiss to quote the following from the 41st report of the Registrar-General of England, page xv:—"I should be glad if the clergy, at the time of registering the marriage, would state that it is of considerable importance, not only to the parties themselves, that their precise ages should be returned either for tracing pedigree or for proof of personal identification in establishing title to property, but that such particulars would also enhance the values of these national records for purposes of statistical investigation."

and 80 married a girl between 17 and 18, a man between 60 and 65 married a girl between 18 and 19, a man between 55 and 60 married a girl between 16 and 17, another man at that age married a girl between 19 and 20, two men between 40 and 45 married girls between 16 and 17, four men at that age married girls between 18 and 19. On the other hand, a youth between 17 and 18, four youths between 18 and 19, and 13 youths between 19 and 20 married women between 20 and 25; three men between 21 and 25 married women between 40 and 45, and one man between 50 and 55 married a woman between 70 and 75.

Age at which marriage is contracted.

449. The next table has been designed for the purpose of showing the age at which those of either sex generally marry, the information being given for the year 1884 and for the decennial period 1871 to 1880 :—

PROPORTION OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1871-80 AND 1884.

Ages.	Bridegrooms.			Brides.		
	Numbers, 1884.	Proportions per 1,000.		Numbers, 1884.	Proportions per 1,000.	
		Year 1884.	Ten Years, 1871-80.		Year 1884.	Ten Years, 1871-80.
Under 15 years ...	...	...	...	3	·42	·48
15 to 16 " ...	...	...	...	10	1·40	2·71
16 to 17 " ...	...	...	·02	63	8·84	12·74
17 to 18 " ...	2	·28	·46	142	19·93	36·74
18 to 19 " ...	15	2·11	1·57	289	40·56	62·69
19 to 20 " ...	37	5·19	6·33	459	64·41	80·93
20 to 21 " ...	121	16·98	16·79	592	83·08	86·94
21 to 25 " ...	2,424	340·26	281·66	3,162	443·73	375·69
25 to 30 " ...	2,472	347·00	295·83	1,507	211·48	174·64
30 to 35 " ...	849	119·17	165·38	375	52·62	69·13
35 to 40 " ...	433	60·78	97·22	208	29·19	44·26
40 to 45 " ...	260	36·50	59·54	113	15·86	26·44
45 to 50 " ...	195	27·37	37·58	96	13·47	14·99
50 to 55 " ...	159	22·32	20·49	60	8·42	6·79
55 to 60 " ...	78	10·95	9·92	34	4·77	3·63
60 to 65 " ...	57	8·00	4·96	11	1·54	1·16
65 to 70 " ...	17	2·39	1·85	1	·14	·40
70 and upwards ...	5	·70	1·00	1	·14	·24
Total ...	7,124*	1,000·00	1,000·00	7,126*	1,000·00	1,000·00

Frequency of marriage at 21 to 30.

450. The large proportion of both sexes marrying at between 21 and 30 years of age is very marked. Owing, no doubt, to the relatively larger numbers in the population, the proportions at these ages in 1884 are much higher than those relating to the decennial period.

* The bridegrooms and brides of unspecified ages being omitted, these numbers are less than those in the last table, the bridegrooms by 94 and the brides by 92. The reason of the bridegrooms being fewer than the brides is that the age was not stated in the case of two more of the former than of the latter.

451. Boys not under 14 and girls not under 12 years of age may, with the consent of their parents or guardians, legally marry in Victoria; but, as a matter of fact, marriages are seldom contracted at such early ages. Two of the males, however, who married in 1884 had not completed their eighteenth year, and one of the females had not completed her fourteenth year; two other females had not completed their fifteenth, and ten others had not completed their sixteenth; as many as 175 of the males, or 1 in every 41, and no fewer than 1,558 of the females, or between a fourth and a fifth, had not attained the full age of 21 years.

Marriages of minors.

452. From the experience of Victoria during recent years, it would appear that, in proportion to the total numbers marrying, more females but fewer males marry under age in this colony than in England and Wales. This is shown by the figures in the following table:—

Marriages of minors in Victoria and England.

MARRIAGES OF MINORS IN VICTORIA AND ENGLAND AND WALES.

Persons Married.	In every 100 Marriages, Numbers under 21 Years of Age.		
	In Victoria.		In England and Wales.
	Year 1884.	Ten Years: 1871 to 1880.	Ten Years: 1871 to 1880.
Bridegrooms ...	2.46	2.52	7.95
Brides ...	21.86	28.32	21.96
Mean ...	12.16	15.42	14.96

453. As the proportion of minors at marriageable ages existing in the population may vary greatly in different countries, and in the same country at different times, it will readily be understood that a comparison of the marriages of minors with the total number of marriages does not afford an infallible test of the tendency to marry under age, to determine which accurately the number of minors marrying should be compared with the number of marriageable minors in the population. This has been done for the last two census periods, the mean number of minors who married in the census year and in the year immediately preceding and following it being compared with the marriageable minors returned at the census, and the result is given in the following table:—

Marriage rate of minors.

MARRIAGES OF MINORS, 1871 AND 1881.

Census Years.	Number of Marriageable Minors returned at Census.		Mean Annual Number of Minors who Married.*		Proportion of Minors who Married to every 1,000 Marriageable Minors Living.	
	Males Aged 17 to 21.	Females Aged 15 to 21.	Males.	Females.	Males.	Females.
1871 ...	19,816	30,306	85	1,305	4·29	43·05
1881 ...	37,675	57,863	151	1,420	4·01	24·54

Decreasing tendency to marry under age.

454. According to the table, the proportion of both males and females marrying under age has become reduced during the interval between the censuses. The reduction in the proportion of male minors marrying is only slight, but that of the female minors is very striking, and is no doubt attributable to the area of selection having been widened by the increase which has taken place in the number of marriageable females at the older ages.

Ages of minors marrying in Victoria and England.

455. By means of the returns of the recent census, it has been possible to analyze still further the marriages of minors, and to show the proportion of the males and females who contract them at each year of age to the total number of males and females living at the same age. Similar results for England and Wales are available,† and are contrasted in the following table with the results relating to Victoria :—

AGES OF MINORS † MARRYING IN VICTORIA AND ENGLAND AND WALES.

Age last Birthday.	Victoria.				Proportion of Marriages per 1,000 Marriageable Minors			
	Marriageable Minors at Census of 1881.		Minors who Married. (Mean of Three Years, 1880-82.)		Males.		Females.	
	Males.	Females.	Males.	Females.	Victoria. (Mean of 1880 to 1882.)	England and Wales. (Mean of 1870 to 1872.)	Victoria. (Mean of 1880 to 1882.)	England and Wales. (Mean of 1870 to 1872.)
15	...	10,076	...	11	...	...	1·09	·18
16	...	10,209	...	39	...	·02	3·82	1·53
17	9,718	10,100	3	146	·31	·41	14·45	9·33
18	9,763	9,966	10	282	1·02	4·04	28·29	36·39
19	9,580	9,352	36	443	3·76	20·34	47·37	72·46
20	8,614	8,160	102	499	11·84	52·98	61·15	105·84
Total...	37,675	57,863	151	1,420	4·01	18·32	24·54	34·08

* Mean of the years 1870 to 1872 and of the years 1880 to 1882.

See 35th Annual Report of the Registrar-General of England, page xii.

† In this table, and that following paragraph 453, marriageable minors have been considered to be males from 17 to 21, females 15 to 21. In England, there were 4 marriages of males at 16, but there were none at that age in Victoria.

456. It appears that in the case of both males and females the tendency to marry under age is much greater in England and Wales than in Victoria. This, as regards females, is the reverse of the result obtained by comparing the marriages of those under 21 with the total number married.* The English proportions relating to males are higher at each age than those of Victoria, but in the first three years of minority the Victorian proportions relating to females are higher than those of England. This, however, is much more than made up in the three succeeding years:

Marriage rate of minors lower in Victoria than England.

457. The following table contains a statement of the proportion of males and females marrying at different ages in various countries. The figures, except those relating to Victoria, have been taken from *Mullhall's Dictionary of Statistics*†:—

Age of marriage in various countries.

AGES OF MALES AND FEMALES MARRYING IN VARIOUS COUNTRIES.

Countries.	Per 1,000 of All Ages Marrying, Numbers—				
	Under 20.	20 to 30	30 to 40	40 to 50	Over 50
BRIDEGROOMS.					
Victoria ...	8	631	229	89	43
England ...	35	731	144	52	38
Scotland ...	32	684	189	62	33
Ireland ...	26	600	269	67	38
France ...	23	607	262	65	43
Italy ...	11	623	259	68	39
Prussia ...	8	663	231	64	34
Russia ...	573	428	122	56	21
Norway ...	8	572	291	83	46
Sweden ...	1	574	299	81	45
Belgium ...	9	548	307	91	45
Holland ...	23	562	281	87	47
BRIDES.					
Victoria ...	181	663	103	40	13
England ...	149	680	111	41	19
Scotland ...	134	686	134	37	9
Ireland ...	137	713	111	27	12
France ...	204	593	145	40	18
Italy ...	171	657	125	34	13
Prussia ...	111	686	152	41	10
Russia ...	573	334	64	23	6
Norway ...	93	657	185	53	12
Sweden ...	51	643	232	59	15
Belgium ...	63	625	222	66	24
Holland ...	99	607	212	61	21

* See table following, paragraph 452 ante.

† Page 305.

Marriages of
minors in
different
countries.

458. It appears by this table that, in proportion to the whole numbers marrying, fewer males marry under age in Victoria than in any of the countries named, except Prussia and Norway (where the proportions are the same as in Victoria) and Sweden, but, on the other hand, that more females marry under age in Victoria than in any of those countries, except France and Russia. Attention is called to the very large proportion shown as marrying under age in the last-named country, exceeding a third of the total marriages in the case of the males, and exceeding half in the case of the females.

Conjugal
condition in
Austral-
asian
colonies.

459. The returns of the Australasian censuses of 1881 give information respecting the conjugal condition of the people living within the borders of the various colonies. These are grouped so as to enable the results to be easily compared.

Husbands
and wives
in Austral-
asian
colonies.

460. The following are the numbers of husbands and wives in each Australasian colony, those under and over 21 years of age being distinguished :—

HUSBANDS AND WIVES IN EACH AUSTRALASIAN COLONY, 1881.

Colony.	Husbands.			Wives.		
	Under 21 Years.	Over 21 Years.	Total.	Under 21 Years.	Over 21 Years.	Total.
Victoria	283	124,371	124,654	3,006	123,036	126,042
New South Wales	408	109,810	110,218	4,040	103,793	107,833
Queensland	118	30,004	30,122	1,285	28,839	30,124
South Australia	95	43,860	43,955	1,344	42,339	43,683
Western Australia	15	4,260	4,275	207	3,769	3,976
Total	919	312,305	313,224	9,882	301,776	311,658
Tasmania*	73	17,671	17,744	607	16,527	17,134
New Zealand... ..	97	73,234	73,331	2,374	70,433	72,807
Grand Total	1,089	403,210	404,299	12,863	388,736	401,599

Proportion
of wives to
husbands.

461. Victoria is the only one of the Australasian colonies in which wives exceeded husbands. In Queensland the numbers were equal, but in all the other colonies husbands were in excess. Wives relatively to husbands were fewest in Western Australia, and next so in Tasmania. The following are the proportions in the different colonies :—

WIVES TO EVERY 10,000 HUSBANDS IN EACH COLONY.

1. Victoria	10,111	5. New South Wales	9,773
2. Queensland	10,000	6. Tasmania	9,656
3. South Australia	9,938	7. Western Australia	9,301
4. New Zealand	9,928		

* In this line the numbers under and over 21 have been partly estimated.

462. According to the ages of those living in the marriage state, the tendency of males to marry under age would appear to be greatest in Tasmania, and least in New Zealand, Victoria standing above the latter colony and South Australia. The following is the order in which the colonies stand in this particular, the colony in which the proportion of husbands under age was largest being placed first, and the rest in succession :—

Proportion of husbands under and over 21.

HUSBANDS UNDER AND OVER 21 YEARS OF AGE IN EVERY 10,000 HUSBANDS LIVING IN EACH COLONY.

	Under 21 Years.	Over 21 Years.
1. Tasmania	41	9,959
2. Queensland	39	9,961
3. New South Wales	37	9,963
4. Western Australia	35	9,965
5. Victoria	23	9,977
6. South Australia	22	9,978
7. New Zealand	13	9,987

463. By the same test, the tendency of women to marry under age would appear to be greatest in Western Australia and Queensland, and least in Victoria—the first two being the colonies in which the proportion of females to the total population is lowest, and the last the colony in which it is highest. The following is the order of the colonies in this respect, the colony in which the proportion of wives under age was greatest being placed first, and that in which it was least last :—

Proportion of wives under and over 21.

WIVES UNDER AND OVER 21 YEARS OF AGE IN EVERY 10,000 WIVES LIVING IN EACH COLONY.

	Under 21 Years.	Over 21 Years.
1. Western Australia	521	9,479
2. Queensland	426	9,574
3. New South Wales	375	9,625
4. Tasmania	354	9,646
5. New Zealand	326	9,674
6. South Australia	308	9,692
7. Victoria	238	9,762

464. It is to be regretted that no figures are at hand showing the conjugal condition of males and females at marriageable ages living in countries out of Australasia ; but the following table contains a statement of the proportions of those of both sexes and all ages unmarried, married, and widowed in various countries. The figures, except those in the first line, have been taken from *Muthall's Dictionary of Statistics** :—

Conjugal condition in various countries.

CONJUGAL CONDITION IN VARIOUS COUNTRIES—BOTH SEXES, AND ALL AGES.

Countries.	Numbers in every 1,000 Living.		
	Unmarried.	Married.	Widowed.
Victoria	665	294	41
England	602	345	53
France	511	405	84
Prussia	606	336	58
Wurtemberg	623	319	58
Austria	605	342	53
Hungary	532	407	61
Italy	582	352	66
Switzerland	609	319	72
Spain	572	360	68
Portugal	628	310	62
Holland	611	328	61
Belgium	629	315	56
Scandinavia	618	330	52
Chili	688	260	52

Small proportion of married in Victoria.

465. It appears from this table that, in Victoria, in proportion to the numbers of the population, fewer persons are living in the marriage state than in any of the other countries named, except Chili; and fewer are living in the widowed state than in any of those countries. This is probably in part accounted for by the fact that the proportion living at marriageable ages, especially of males, is smaller in Victoria than in most of those countries.

Births, 1884.

466. The births registered in Victoria during 1884 numbered 28,850, as against 27,541 in 1883. The increase in the year under review, as compared with the previous one, was thus 1,309.

Births in 1884 and former years.

467. During the 15 years prior to 1884, the number of births in Victoria had remained almost stationary; but in that year a marked increase took place, and the number was higher than in any previous year. In only one other year did the births exceed 28,000, viz., in 1873, but they then numbered 750 less than in the year under review.*

Birth rate

468. The birth rate has been declining steadily during the last 20 years. The marriage rate also declined until 1879, but since then it has revived. There has not, however, been a corresponding improvement in the birth rate, which in 1884 was only higher by a fraction than in the previous year, which was that in which the birth rate was absolutely the lowest. The following are the figures for the last twenty-five years:—

* For number of births in each year, see Statistical Summary of Victoria (first folding sheet) *ante*.

ANNUAL BIRTH RATE, 1860 TO 1884.

				Births per 1,000 of Mean Population.					Births per 1,000 of Mean Population.
1860	...	...	...	42·81	1874	...	...	...	34·46
1861	...	...	...	43·46	1875	...	...	...	33·94
1862	...	...	...	44·50	1876	...	...	...	33·61
1863	...	...	...	42·46	1877	...	...	...	32·17
1864	...	...	...	43·79	1878	...	...	...	32·36
1865	...	...	...	42·40	1879	...	...	...	32·18
1866	...	...	...	39·76	1880	...	...	...	30·75
1867	...	...	...	39·75	1881	...	...	...	31·24
1868	...	...	...	41·08	1882	...	...	...	30·04
1869	...	...	...	37·89	1883	...	...	...	30·02
1870	...	...	...	38·07	1884	...	...	...	30·49
1871	...	...	...	37·15					
1872	...	...	...	36·33					
1873	...	...	...	36·71					
					Mean of 25 years ...				36·70

469. Birth rates, based upon a comparison of the number of events with the total population, are, like marriage rates calculated upon a similar basis, apt to mislead, unless the population is in a normal condition. It must be quite evident that, if there is not a sufficient proportion of married women at the fruitful or child-bearing ages in a community, the birth rate is not likely to be high, but that an excess of such women would probably cause a high birth rate. This will be made apparent by the following table, which shows the birth rate, calculated upon the total population and upon the number of married women at the child-bearing period of life, in the last two census years :—

PROPORTION OF BIRTHS TO POPULATION AND TO MARRIED WOMEN.

Year of Census.	Enumerated Population.	Married Women under 45 Years of Age.	Legitimate Births.*	Proportion of Legitimate Births.	
				Per 1,000 of the Population.	Per 1,000 Married Women under 45 Years of Age.
1871	731,528	88,561	26,805	36·64	302·67
1881	862,346	84,831	25,675	29·77	302·66

470. It will be noticed that the married women at reproductive ages were fewer by 3,730 in 1881 than in 1871, that the proportion of births to such women, viz., 302 $\frac{2}{3}$ per 1,000, was exactly the same in both years, but that the proportion of births to the total population was considerably less in 1881 than in 1871. Thus, while the birth rate based upon a comparison of the births with the married women remained perfectly steady, that rate based upon a comparison of the births with the population showed a falling-off of nearly 7 per 1,000. The reduction in the

* In both cases, these are the legitimate births which occurred during the twelve months of which the census was the middle.

birth rate, calculated in the ordinary way, which has been noticed for years past, is therefore conclusively shown to be due to a deficiency in the community of married women at the fruitful period of life.

Birth rates
in Austral-
asian
colonies.

471. Returns of the births in all the Australasian colonies are available to the end of 1883, and from these and the mean populations of the respective colonies during each year the birth rates have been calculated in the office of the Government Statist, Melbourne. The following table gives the birth rates of the different colonies for each year from 1865 to 1883, or as many years between those periods as the figures are available for:—

BIRTH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1883.*

Year.	Number of Births per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queens-land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865 ...	42·40	42·99	43·65	43·90	...	32·56	41·12
1866 ...	39·76	40·22	44·86	42·38	...	29·15	42·89
1867 ...	39·75	41·67	45·66	41·87	...	30·34	42·18
1868 ...	41·08	40·43	43·03	41·51	...	30·03	42·14
1869 ...	37·89	40·41	42·83	39·03	...	28·27	41·90
1870 ...	38·07	39·76	43·51	38·48	...	30·18	42·32
1871 ...	37·15	39·42	43·25	38·34	...	30·16	40·64
1872 ...	36·33	38·27	40·70	37·60	32·42	29·44	39·50
1873 ...	36·71	39·01	40·82	36·42	31·43	29·43	39·00
1874 ...	34·46	38·75	41·11	38·22	33·71	29·72	40·27
1875 ...	33·94	37·83	38·90	35·70	28·72	29·88	40·23
1876 ...	33·61	37·69	37·48	37·71	33·98	30·11	41·73
1877 ...	32·17	36·92	36·75	37·36	33·07	30·21	41·28
1878 ...	32·36	37·36	35·77	38·23	31·11	32·27	42·14
1879 ...	32·18	37·72	36·74	38·96	34·38	32·05	40·32
1880 ...	30·75	39·04	36·92	38·94	32·35	32·91	40·78
1881 ...	31·24	38·00	37·19	38·66	33·67	33·40	37·95
1882 ...	30·04	37·16	35·85	37·40	35·84	33·50	37·32
1883 ...	30·02	37·09	36·92	37·37	33·87	34·25	36·28
Means ...	35·26	38·94	40·10	38·85	32·88	30·94	40·53

Diminished
birth rate in
most of the
colonies.

472. During recent years the birth rates in all the colonies, except Tasmania and Western Australia, have exhibited a downward tendency, and have been considerably lower than those quoted for the early years named in the table. In Victoria and New Zealand, indeed, the birth rate in 1883 was the lowest during the whole period to which the table refers; in New South Wales it was the lowest with one exception, and in South Australia with three exceptions. On the other hand, a marked improvement in the birth rate in Tasmania has taken place during the last two or three years, coincidentally with a rising marriage rate,† and

* For the number of births in the various colonies during the twelve years ended with 1884, see General Summary of Australasian Statistics (third folding sheet) *ante*. For birth rates in 1884, see Appendix A *post*.

† See paragraph 399 *ante*.

it was much higher in 1883 than in any previous year. The diminished birth rate in Victoria between 1871 and 1881 has already been accounted for by the falling-off which occurred in the number of mothers; and it is probable that the low birth rates now prevailing in some of the other colonies are due to a similar cause.

473. The following is the order of the colonies in reference to their respective birth rates in the last year shown in the table and according to the average of the whole period of nineteen years. It will be observed that Victoria is absolutely last on the list for 1883, but stands fifth in the nineteen-year series :—

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO BIRTH RATES.

Order in 1883.	Order in a Series of Years.
1. South Australia.	1. New Zealand.
2. New South Wales.	2. Queensland.
3. Queensland.	3. New South Wales.
4. New Zealand.	4. South Australia.
5. Tasmania.	5. Victoria.
6. Western Australia.	6. Western Australia.
7. Victoria.	7. Tasmania.

474. On the continent of Australia, taken as a whole, the birth rate in 1883 shows a slight improvement on the low rate prevailing in the previous year; but on the Australian continent, combined with Tasmania and New Zealand, the birth rate in 1883 was the lowest during the last eleven years. This will be seen by the following figures for the eleven years ended with 1883 :—

BIRTH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1883.

Year.	Number of Births per 1,000 of Mean Populations.	
	Continent of Australia.	Australia with Tasmania and New Zealand.
1873	37·36	37·19
1874	36·46	36·70
1875	35·29	35·82
1876	35·20	36·04
1877	34·15	35·16
1878	34·31	35·51
1879	34·55	35·42
1880	35·33	36·20
1881	35·22	35·63
1882	34·18	34·73
1883	34·31	34·66
Means	34·90	35·59

475. The birth rates in certain British colonies outside Australasia, including all those for which the information is available, are shown in the following table. In some cases the figures are only for one or two years :—

BIRTH RATES IN BRITISH POSSESSIONS.

Colonies.	Years.	Number of Births per 1,000 of the Population.
Ceylon	1867-76	27·7
Straits Settlements	1873-7	9·3*
Hong Kong	1875	13·8
Mauritius	1876-7	36·5
Seychelles	1875-7	37·4
Bermudas	1871-5	37·8
British Guiana	1871-9	35·5
West Indies—		
Bahamas	1874-5	39·0
Jamaica	1878-80	34·9
St. Lucia	1869-79	46·4†
St. Vincent	1870-9	46·0
Barbadoes	1872-8	43·2
Grenada	1871-5	45·2
Antigua	1875-6	40·4
Montserrat	1874-5	48·8
Dominica	1871-6	31·0
Trinidad	1880	34·9

Birth rates in European countries.

476. A statement of the birth rates in British and certain Foreign countries for each of the fifteen years ended with 1882, or such of those years as the information is available for, is given in the following table. The figures have been taken from the reports of the Registrar-General of England :—

BIRTH RATES IN EUROPEAN COUNTRIES, 1868 TO 1882.

Year.	Number of Births per 1,000 of Mean Populations.														
	England and Wales.	Scotland.	Ireland.†	Denmark.	Sweden.	Norway.	Austria.	Hungary.	German Empire.§	Belgium.	The Netherlands.	France.	Switzerland.	Spain.	Italy.
1868 ...	35·8	35·3	26·7	31·2	27·5	...	38·7	42·4	36·9	31·5	34·7	25·7	...	34·4	35·4
1869 ...	34·8	34·3	26·7	29·5	28·2	...	40·2	42·6	37·9	31·6	34·5	25·7	...	35·7	37·2
1870 ...	35·2	34·6	27·7	30·5	28·3	...	40·5	41·7	38·5	32·3	37·6	25·5	29·8	35·4	36·8
1871 ...	35·0	34·5	28·1	30·2	30·4	29·2	39·8	43·0	33·8	31·0	36·9	22·6	29·0	...	37·0
1872 ...	35·7	34·9	27·8	30·3	30·0	29·7	40·0	41·0	39·5	32·3	37·4	26·8	29·8	...	37·9
1873 ...	35·4	34·9	27·1	30·8	30·8	29·9	40·9	42·2	39·7	32·5	37·7	26·1	29·7	...	36·4
1874 ...	36·0	35·7	26·6	30·9	30·9	30·7	40·7	42·7	40·1	32·6	37·9	26·2	30·4	...	34·9
1875 ...	35·4	35·4	26·1	31·9	31·0	31·2	40·9	45·2	40·6	32·5	38·1	26·0	31·8	...	37·8
1876 ...	36·3	35·9	26·4	32·6	30·7	31·8	41·0	45·6	40·8	33·2	38·5	26·2	32·8	...	39·2
1877 ...	36·0	35·6	26·2	31·8	30·9	31·8	39·7	43·3	40·1	32·3	36·3	25·5	32·0	...	36·9
1878 ...	35·6	35·3	25·1	31·7	29·7	31·1	39·5	42·8	38·9	31·5	35·8	25·2	31·3	...	36·0
1879 ...	34·7	34·7	25·2	32·0	30·5	32·0	40·3	45·3	38·9	31·5	37·4	25·0	30·5	...	37·6
1880 ...	34·2	34·0	24·7	31·8	29·4	30·7	38·7	42·9	37·6	31·3	35·6	24·5	29·6	...	33·6
1881 ...	33·9	33·7	24·5	32·3	29·1	30·0	38·7	43·7	37·0	31·8	34·9	24·9	29·8	...	38·0
1882 ...	33·7	33·3	24·1	32·4	29·4	30·9	38·9	44·6	37·2	31·2	35·3	24·8	28·8	...	37·1
Means	35·2	34·8	26·2	31·3	29·8	30·6	39·9	43·3	38·5	31·9	36·4	25·4	30·4	35·1	36·8

* Registrations incomplete.

† Including still-births.

‡ It is explained that the low birth rate in Ireland is partly attributable to the small proportion of females in the population at child-bearing ages. (See 15th Detailed Report of the Registrar-General of Ireland, pages 12 and 29.) There is also no doubt, however, that the figures understate the truth, the registration being admittedly defective.

§ The figures for the years from 1868 to 1871 refer to Prussia only.

477. It is reasonable to suppose that the averages in this table will follow a similar order to those in the table of marriage rates,* and this is found to be the case, except in respect to three countries, viz., France, Spain, and Italy. The discrepancy may be only apparent in the case of Spain, as the average is for no more than three years, and in Italy it is satisfactorily explained by the circumstance that many marriages have not been registered †; but as regards France no such explanation can be given, and the fact remains that, whilst it has a comparatively high marriage rate, its birth rate is lower than that of any other European country, and is but little above its own death rate. ‡ It will be remarked that in the last two or three years named the birth rate in most of the countries named was unusually low, this being the case most particularly in England, Ireland, Scotland, Austria, Germany, Belgium, Netherlands, France, and Switzerland.

Discrepancies between birth and marriage rates in European countries.

478. The birth rate in Victoria, taken over a series of years, approximates to that in England, Scotland, and Holland, is lower than that in the Central European States and Italy, but higher than that in any of the other countries named in the last table. In four of the Australasian colonies—viz., New Zealand, Queensland, New South Wales, and South Australia—the average rate is much higher than in Italy, but is about equal to that in Central Europe (excepting Hungary)—the rate in the two former slightly exceeding that in Austria, and in the two latter nearly equalling that in Germany. In Western Australia, the rate is somewhat higher than in Belgium; whilst in Tasmania it is about equal to that in Denmark, Norway, or Switzerland, but lower than in any of the other countries named, except Sweden, Ireland, and France.

Australasian and European birth rates compared.

479. According to the reports of the Registrar-General of England, the birth rate of the United Kingdom was lower in 1882 than in any year since 1870, as will be seen by the following figures :—

Birth rate in United Kingdom.

BIRTH RATE IN THE UNITED KINGDOM, 1871 TO 1882.

Births per 1,000 of the Population.			Births per 1,000 of the Population.		
1871	...	35·0	1878	...	34·1
1872	...	34·4	1879	...	33·5
1873	...	34·1	1880	...	32·7
1874	...	34·5	1881	...	32·5
1875	...	34·0	1882	...	32·2
1876	...	34·9			
1877	...	34·5	Mean	...	34·0

* See table following paragraph 412 ante.

† See footnote (§) to table following paragraph 412 ante.

‡ An explanation of the low birth rate in France is given, as follows, by the Registrar-General of England in his 41st Report, page xlvii :—"The low birth rate in France cannot be attributed to a small proportional number of women at the child-bearing ages, for the proportion is higher in France than in any other country of Europe; indeed, it is generally recognized to be chiefly, though indirectly, due to the subdivision of land among the peasant proprietors. The better class of the labouring population aspire to become proprietors of small holdings: by thrift and industry they accumulate capital for this purpose, and avoid by their social philosophy the division of their property amongst a large family at their decease."

Birth rates
in town and
country,
1884.

480. The following table shows the births and birth rates in the metropolis, the extra-metropolitan towns, and the country districts of Victoria during 1884; also the estimated population of such divisions about the middle of that year:—

BIRTHS IN URBAN AND COUNTRY DISTRICTS, 1884.

Districts.	Estimated Mean Population.	Births, 1884.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	322,690	10,911	33·81
Extra-Metropolitan Towns	190,636	6,252	32·80
Country districts ...	432,774	11,687	27·01
Total ...	946,100	28,850	30·49

Birth rates
in town and
country,
1873 to 1884.

481. The next table shows the number of births per 1,000 of the population of the same three divisions of the colony during each of the last twelve years:—

BIRTH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1884.

Year.	Number of Births per 1,000 of the Population.			
	Greater Melbourne.	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873 ...	34·36	40·18	36·32	36·71
1874 ...	32·98	39·81	32·46	34·46
1875 ...	33·63	38·63	31·54	33·94
1876 ...	33·20	37·80	31·61	33·61
1877 ...	33·09	34·51	30·30	32·17
1878 ...	33·67	35·42	29·89	32·36
1879 ...	33·32	35·65	29·63	32·18
1880 ...	31·19	34·21	28·72	30·75
1881 ...	32·42	34·84	28·66	31·24
1882 ...	32·85	31·35	27·41	30·04
1883 ...	33·15	32·07	26·81	30·02
1884 ...	33·81	32·80	27·01	30·49

Results
compared

482. It will be noticed that in the first two years of the period to which the table refers the birth rate of the country districts was about equal to that of the metropolis, whilst the birth rate of the extra-metropolitan towns was very much higher than either. Since 1874, however, the metropolitan rate has been much above that of the country districts, but until 1882 was still below that of the extra-metropolitan towns. In that and the subsequent years, however, owing to a falling-off in the birth rate in the extra-metropolitan towns and in the country districts, and a gradual increase in that of the metropolis, the rate in the last-named division was much above that in the other urban district.

483. The mean population, the number of births, and the birth rate during 1884; also the birth rate during the ten years, 1871 to 1880, in the different municipalities, &c., forming the component parts of the district of Greater Melbourne, are shown in the following table:—

Birth rates in metropolitan sub-districts.

BIRTHS IN GREATER MELBOURNE.

Sub-districts.	Year 1884.			Ten Years : 1871-80.
	Estimated Mean Population.	Births.		Annual Births per 1,000 of Population.
		Total Number.	Number per 1,000 of the Population.	
Melbourne City	66,507	1,776	26·70	27·57
Hotham Town	18,750	774	41·28	34·03
Fitzroy City	23,400	867	37·05	34·57
Collingwood City	25,631	977	38·12	36·28
Richmond City	26,662	962	36·08	35·96
Brunswick Borough	8,396	349	41·57	38·66
Northcote Borough*	2,000	68	34·00	...
Prahran City	27,000	852	31·56	32·38
South Melbourne City	32,500	1,107	34·06	32·02
Port Melbourne Borough	9,350	383	40·96	38·99
St. Kilda Borough	14,678	369	25·14	29·03
Brighton Borough	5,353	145	27·09	31·14
Essendon Borough	5,020	100	19·92	} 37·72
Flemington & Kensington Borough	4,157	158	38·01	
Hawthorn Borough	7,919	249	31·44	34·13
Kew Borough	4,888	122	24·96	26·95
Footscray Borough	7,780	335	43·06	45·62
Williamstown Borough	9,374	359	38·29	38·88
Remainder of district	18,266	546	29·89	25·83
<i>Hospitals, asylums, &c.</i> †	3,581	413	...	...
Shipping in Hobson's Bay and river	1,478 ‡	...	...	·05
Total	322,690	10,911	33·81	33·50

484. It will be observed that during the ten years ended with 1880 the births in one municipality only, viz., Footscray, were above 40 per 1,000 of the population ; that in six municipalities, viz., Williamstown, Essendon and Flemington, Port Melbourne, Brunswick, Collingwood, and Richmond, they were between 35 and 40 per 1,000 ; in six municipalities, viz., Fitzroy, Hotham, Prahran, South Melbourne, Brighton, and Hawthorn, they were between 30 and 35 per 1,000 ; and that in three municipalities, viz., St. Kilda, Melbourne, and Kew, they were below 30 per 1,000. The lowest rate was in "Remainder of District,"

Birth rates in sub-districts, 1871 to 1880.

Formerly included in the "Remainder of District."

† The population given is that of all the institutions, but the Lying-in Hospital is the only one in which births occurred.

‡ Census figures.

viz., not quite 26 per 1,000, which was even lower than in the rural districts of the colony.*

Birth rates in sub-districts, 1884. 485. During 1884, the birth rates in Hotham, Fitzroy, Collingwood, Richmond (slightly), Brunswick, South Melbourne, Port Melbourne, Flemington and Kensington (slightly), and "Remainder of District" were higher, but those in all the other sub-districts were lower, than they were in the decennium ended with 1880. The sub-district with the highest birth rate in 1884 was Footscray, which was closely followed by Brunswick, Hotham, and Port Melbourne; those with the lowest rates were Essendon,† Kew, St. Kilda, Melbourne City, and Brighton, in all of which the rates were even lower than in the "Remainder of District."

Birth rate in London. 486. The birth rate in London, according to the average of the ten years 1870-79, was 35·4, or slightly higher than that of England and Wales (35·3) during the same period. It was thus nearly 2 per 1,000 above the average in Melbourne and suburbs.

Birth rates in British towns. 487. The forty-third Report of the Registrar-General of England‡ contains a statement of the birth rate in twenty-three British towns, in which the rate per 1,000 persons living ranges from 30·3 in Brighton to 41·5 in Salford. The birth-rate in Greater Melbourne was lower than in any of those towns except Brighton, Plymouth, Glasgow, Dublin, and Edinburgh, as will be seen by the following figures:—

BIRTH RATES IN TWENTY-THREE BRITISH TOWNS, 1880.

		Births per 1,000 of Population.			Births per 1,000 of Population.
Salford	...	41·5	Nottingham	...	35·3
Leicester	...	40·4	Bradford	...	35·3
Birmingham	...	38·4	Bristol	...	35·3
Sheffield	...	38·3	London	...	35·2
Liverpool	...	38·1	Portsmouth	...	34·8
Manchester	...	37·5	Norwich	...	33·9
Wolverhampton	...	37·4	Edinburgh	...	32·8
Hull	...	37·4	Dublin	...	32·1
Sunderland	...	37·4	Glasgow	...	31·9
Leeds	...	37·3	Plymouth	...	31·6
Newcastle-on-Tyne	...	37·1	Brighton	...	30·3
Oldham	...	35·5			

Birth rates in foreign towns. 488. The same report§ contains a statement of the birth rate in twenty-one foreign towns (including two in British India), in which the rate ranges from 22·9 in Geneva to 42·9 in Alexandria. In six of these towns, viz., Geneva, Venice, Bombay, Paris, Turin, and Brussels,

* See table following paragraph 481 *ante*.

† The rate in Essendon would appear to have been only 20 per 1,000. It is probable, however, that the population in that district has been over-stated.

‡ See 43rd Annual Report of Registrar-General, page cxi: Eyre and Spottiswoode, London, 1882.

§ See 43rd Report, page cxiv.

the birth rate was lower than in Greater Melbourne, but in all the rest it was higher. The following are the rates in these towns, also the rate in New York, taken from the reports of the Health Department of that city:—

BIRTH RATES IN TWENTY-TWO FOREIGN TOWNS, 1880.

	Births per 1,000 of Population.		Births per 1,000 of Population.
Alexandria ...	42.9	Breslau ...	36.7
Buda-Pesth ...	40.6	Amsterdam ...	36.6
Hamburg (State) ...	39.5	Dresden ...	34.5
Madras ...	39.4	Christiania ...	33.7
The Hague ...	39.3	Brussels ...	31.2
Berlin ...	39.2	New York ...	30.4*
Rotterdam ...	38.3	Turin ...	29.8
Vienna ...	38.3	Paris ...	28.7
Munich ...	38.2	Bombay ...	26.6
Rome ...	37.3	Venice ...	23.9
Copenhagen ...	36.8	Geneva ...	22.9

489. The births of males in Victoria during 1884 numbered 14,844, those of females 14,006. These numbers furnish a proportion of 105.99 boys to 100 girls, as against a proportion of 105.04 in 1883. In the ten years 1871-80, 137,275 births of males and 131,435 births of females were registered, giving a proportion of 104.45 boys to 100 girls.

490. In every country in which births are registered, it is found that more males are born than females. This was the case in all the Australasian colonies during the period of eleven years ended with 1883, although not in every one of those years so far as Western Australia and Tasmania are concerned. The following are the numbers of males per 100 females born in the respective colonies during each year of the period referred to:—

PROPORTION OF MALE TO FEMALE BIRTHS IN AUSTRALASIAN COLONIES, 1873 TO 1883.

Year.	Number of Boys to 100 Girls Born.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1873 ...	102.65	104.38	106.13	102.77	109.04	98.44	103.48
1874 ...	103.94	104.31	105.74	103.44	103.25	107.02	106.83
1875 ...	104.95	102.08	104.01	103.85	98.95	109.51	107.80
1876 ...	105.76	102.47	105.26	101.08	106.76	111.48	106.01
1877 ...	104.19	106.34	106.78	102.91	101.32	105.04	104.59
1878 ...	107.19	106.83	103.89	107.14	101.15	105.52	101.57
1879 ...	104.69	105.71	103.36	102.53	117.59	99.11	105.93
1880 ...	104.44	104.99	103.63	110.98	92.37	101.56	104.71
1881 ...	104.99	105.59	106.64	106.48	108.07	107.41	104.90
1882 ...	103.63	103.23	107.55	106.36	110.64	104.81	104.46
1883 ...	105.04	104.89	106.17	103.29	104.64	110.42	105.17

* The number of births registered in New York would give a proportion of 22.8 per 1,000 of the population, but it is stated that the registered births are 25 per cent. below the actual number which take place, so that the correct proportion is as here stated.

Order of colonies in respect to sexes of those born.

491. In the Australasian colonies, taken as a whole, the proportion during the ten years ended with 1882 was 104·67 male to 100 female infants. In the different colonies, the proportions ranged from 105·3 per 100 females in Queensland to 104·6 per 100 females in Victoria and New South Wales. The following is the order of the colonies in respect to these proportions :—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF MALE TO FEMALE BIRTHS, 1873 TO 1882.

Boys to 100 Girls.		Boys to 100 Girls.	
Queensland ...	... 105·30	Victoria ...	... 104·64
New Zealand ...	... 105·03	New South Wales ...	... 104·59
Tasmania ...	... 104·99		
Western Australia ...	... 104·91	Mean ..	... 104·67
South Australia ...	... 104·75		

Births of males and females in British and foreign countries.

492. In England and Wales, during the ten years ended with 1879, 103·9 boys were born to 100 girls, and the Registrar-General of England mentions it as “a curious fact, which has as yet received no certain explanation,” that the proportion of male to female births is not only lower than in any other European country, but has been diminishing steadily. In support of which statement he publishes the following figures,* to which the figures for England from 1881 to 1883 have been added :—

PROPORTION OF MALE TO FEMALE BIRTHS IN CERTAIN COUNTRIES, 1870 TO 1879.

Boys to 100 Girls.		Boys to 100 Girls.	
Italy ...	... 107·1	Holland ...	... 106·1
Austria ...	... 106·8	Belgium ...	... 105·9
France ...	... 106·4	Scotland ...	... 105·7
Switzerland ...	... 106·3	Ireland ...	... 105·6
German Empire ...	... 106·2	England and Wales ...	... 103·9

PROPORTION OF MALE TO FEMALE BIRTHS IN ENGLAND AND WALES AT DIFFERENT PERIODS.

Boys to 100 Girls.		Boys to 100 Girls.	
1856 to 1860...	... 104·6	1876 to 1880...	... 103·8
1861 to 1865...	... 104·3	1881 ...	... 103·9
1866 to 1870...	... 104·1	1882 ...	... 103·8
1871 to 1875...	... 103·9	1883 ...	... 103·5

Australasian and other countries compared.

493. It will be observed that the proportion of male to female births in all the Australasian colonies is higher than the proportion in England and Wales, but below that in any of the other countries named.

Twins and triplets.

494. In 1884, 239 twin births and 4 triple births were registered, as against 183 twin births but no triple births in 1883. In the ten

* See 43rd Report of the Registrar-General of England, page xvi.

years ended with 1880, 2,426 cases of twins and 21 cases of triplets were recorded, the total number of births in the same period having been 268,710. There were thus 266,242 confinements in the ten years, and it follows that 1 mother in every 111 gave birth to twins, and 1 mother in every 12,796 was delivered of three children at a birth.

495. If the following figures, taken from Mr. Mulhall's work,* are to be relied upon, a comparatively small number of double and triple births occur in Victoria, she being, in the latter respect, below all the countries for which information is given; and, in the former, below all except Spain:—

Twins and triplets in various countries.

TWINS AND TRIPLETS IN VARIOUS COUNTRIES.

Countries.	Per 1,000 Births.		Countries.	Per 1,000 Births.	
	Number of Twins.	Number of Triplets.		Number of Twins.	Number of Triplets.
Victoria ..	9·03	·08	Italy ...	11·8	·14
England ...	11·2	...	Switzerland ...	12·0	...
Scotland ...	11·7	...	Spain ...	8·4	...
Ireland ...	17·6	...	Belgium ...	9·1	·10
France ...	10·1	·12	Holland ...	12·8	...
Germany ...	12·9	·13	Denmark ...	13·7	·24
Russia ...	12·1	...	Sweden ...	13·6	·18
Austria ...	13·4	·18	Norway ...	11·8	·15
			Iceland ...	14·2	·33

496. According to the figures, the highest proportion of double births occurs in Ireland, and the highest proportion of triple births in Iceland.

Countries in which most twins and triplets occur.

497. The illegitimate children born in 1884 numbered 1,238, or 1 in every 23 births registered. Those in 1883 and 1882 were set down as 1 in 21; in 1881 as 1 in 20; in 1880 and 1879 as 1 in 21; in 1878 as 1 in 24; in 1877 as 1 in 26; in 1876 as 1 in 27; and in 1875 as 1 in 34. In the ten years, 1871–80, out of 268,710 infants born, 9,868 were traced as having been born out of wedlock, which numbers furnish a proportion of 1 illegitimate child to every 27 births.†

Illegitimate births.

498. It was shown in a previous table‡ that the legitimate births registered in each of the last two census years were in the proportion of 302 $\frac{2}{3}$ to every 1,000 married women living at the reproductive period of life. It follows, therefore, from the number of legitimate births registered in 1884, that, approximately, 91,230 married women at

Women living in concubinage.

* Dictionary of Statistics, page 50.

† For many reasons, statistics of illegitimacy generally understate the truth.—See remarks upon the subject in the *Victorian Year-Book*, 1877–8, paragraph 259.

‡ See table following paragraph 469 ante.

the fruitful or child-bearing age were living in the colony during that year. Assuming that the illegitimate births bear the same proportion to unmarried women, it also follows, from the number of such births in 1884, that, exclusive of public prostitutes (who, as they rarely have children, are omitted from the computation), at least 4,090 single women at the fruitful or child-bearing ages were living in concubinage. If from the total number of women in the colony between the ages of 15 and 45—estimated to be 209,253—be deducted the approximate number of married women above referred to, viz., 91,230, the difference will give 118,023 as the number of unmarried women and widows at those ages. It therefore follows that 1 out of every 29 of these was living immorally.

Illegitimacy
and concu-
binage,
1873 to
1884.

499. The following table gives a statement of the number of illegitimate births and their proportion to the total number registered; also the estimated number of women living in concubinage, and their proportion to the total number of single women at reproductive ages living in Victoria, according to the returns of the last twelve years:—

ILLEGITIMACY AND CONCUBINAGE, 1873 TO 1884.

Year.	Illegitimate Births.		Women Living in Concubinage (exclusive of Public Prostitutes).	
	Total Number.	Percentage of Total Births.	Estimated Total Number.	Number per 100 Single Women between 15 and 45 Years of Age Living in Victoria.
1873	893	3·18	2,951	4·54
1874	984	3·67	3,251	4·41
1875	779	2·92	2,573	3·36
1876	975	3·64	3,221	4·02
1877	1,010	3·88	3,337	3·85
1878	1,103	4·15	3,644	4·20
1879	1,304	4·86	4,308	4·78
1880	1,254	4·80	4,143	4·39
1881	1,382	5·09	4,551	4·49
1882	1,271	4·75	4,200	3·91
1883	1,292	4·69	4,268	3·72
1884	1,238	4·29	4,090	3·46
Means	1,124	4·16	3,713	4·18

Illegitimacy
in Austral-
asian
colonies.

500. Besides Victoria, the only Australasian colonies which publish statistics of illegitimacy are New South Wales, Queensland, and New Zealand. According to these, which possibly may not in every case represent the whole truth,* illegitimacy was, over a series of years, most rife in New South Wales, next so in Victoria, next in Queensland,

* See footnote to paragraph 497 ante.

and least of all in New Zealand. During the last six years, however, the proportion was even higher in Victoria than in New South Wales. In all the colonies, so far as figures are available, illegitimacy appears to have a tendency to increase. The following table shows the percentage of illegitimate to the total births in the four colonies named during each of the twelve years ended with 1883 :—

ILLEGITIMACY IN AUSTRALASIAN COLONIES, 1872 TO 1883.

Year.	Illegitimate Births to every 100 Children Born.			
	Victoria.	New South Wales.	Queensland.	New Zealand.
1872	2.99	4.03	2.92	...
1873	3.18	4.15	2.71	1.42
1874	3.67	4.22	2.76	1.30
1875	2.92	4.20	3.43	1.36
1876	3.64	4.08	3.21	2.23
1877	3.88	4.14	3.64	2.08
1878	4.15	4.03	3.68	2.41
1879	4.86	4.51	4.31	2.30
1880	4.80	4.35	4.31	2.43
1881	5.09	4.26	4.20	2.85
1882	4.75	4.24	4.40	2.87
1883	4.69	4.24	3.66	2.78
Means	4.05	4.20	3.60	2.18

501. A calculation based upon the illegitimate births which occurred in the census year shows that concubinage is most rife in Queensland, next in New South Wales, and next in Victoria and New Zealand, there being only a slight difference between the two last-named colonies. In the following table the colony in which the largest proportion of concubinage exists is placed first, and that in which the smallest proportion exists, last :—

Concubinage in Australasian colonies.

CONCUBINAGE IN AUSTRALASIAN COLONIES, 1881.

Colony.	Single Women between 15 and 45 Years of Age.	Illegitimate Births, 1881.	Single Women living in Concubinage (exclusive of Public Prostitutes).	
			Total Number.	Number per 100 Single Women between 15 and 45.
1. Queensland	15,441	345	1,059	6.86
2. New South Wales	71,085	1,263	3,665	5.16
3. Victoria	101,451	1,382	4,551	4.49
4. New Zealand	38,659	534	1,686	4.36

Proportion
of concubi-
nage in each
colony.

502. The figures in the last column show the proportions which the single women leading a sexually immoral life, without being public prostitutes, bear to the whole number of single women at the fruitful period of life in each colony. These proportions will, perhaps, be better understood if expressed in another manner as follow :—

In Queensland	1 single woman in 13	was living	immorally.
In New South Wales	”	”	19 ” ”
In Victoria	”	”	22 ” ”
In New Zealand	”	”	23 ” ”

Illegitimacy
in United
Kingdom.

503. Illegitimacy in England and Wales appears to be commoner than, and in Scotland more than twice as rife as, it is in any of the Australasian colonies named. In Ireland, on the other hand, if the figures are reliable, it is less prevalent than in any of those colonies except New Zealand. This will be observed by comparing the following table with the previous one :—

ILLEGITIMACY IN ENGLAND, SCOTLAND, AND IRELAND,
1871 TO 1882.

Year.	Illegitimate Births to every 100 Children Born.		
	England and Wales.	Scotland.	Ireland.
1871	5·6	9·5	2·7
1872	5·4	9·1	2·5
1873	5·2	9·0	2·4
1874	5·0	8·7	2·3
1875	4·8	8·6	2·3
1876	4·7	8·6	2·3
1877	4·7	8·4	2·4
1878	4·7	8·4	2·3
1879	4·8	8·5	2·5
1880	4·8	8·4	2·5
1881	4·9	8·3	2·5
1882	4·9	8·1	2·7
Means	5·0	8·6	2·4

Illegitimacy
in France.

504. Statistics of illegitimacy in France for the years 1873 to 1881 were quoted by M. Toussaint Loua, Director of the Bureau of General Statistics of France, in a paper read by him before the Statistical Society of Paris on the 21st March, 1883; and M. Loua has since given the society the proportions in the two following years.* By M. Loua's figures, which are subjoined, it appears that illegitimacy in France is not so rife as in Scotland, but is more so than in England, Ireland, or any of the Australasian colonies:—

* See *Journal de la Société de Statistique de Paris*, vingt-quatrième année, page 160: Berger-Levrault. Paris, 1883.

ILLEGITIMACY IN FRANCE, 1873 TO 1883.

Year.	Illegitimate Births to every 100 Children Born.	Year.	Illegitimate Births to every 100 Children Born.
1873 ...	7.46	1880 ...	7.41
1874 ...	7.26	1881 ...	7.48
1875 ...	7.03	1882 ...	7.62
1876 ...	6.96	1883 ...	7.90
1877 ...	7.08		
1878 ...	7.25	Mean ...	7.32
1879 ...	7.07		

505. The following figures, taken—except as regards the Austral-
 asian colonies, England, Scotland, Ireland, and France—from Mr. Mulhall's book,* show certain countries arranged in order according to the extent of illegitimacy prevailing in each, the proportion of illegitimate births being also shown:—

ILLEGITIMACY IN VARIOUS COUNTRIES.

Country.	Illegitimate Births to every 100 Children Born.	Country.	Illegitimate Births to every 100 Children Born.
Austria ...	12.9	England ...	5.0
Denmark ...	11.2	Switzerland ...	4.6
Sweden ...	10.2	New South Wales ...	4.2
Scotland ...	8.6	Victoria ...	4.0
Norway ...	8.5	Queensland ...	3.6
Germany ...	8.4	Holland ...	3.5
France ...	7.3	Russia ...	3.1
Belgium ...	7.0	New Zealand ...	2.8
Italy ...	6.8	Ireland ...	2.4
Portugal ...	5.6	Greece ...	1.6
Spain ...	5.5		

506. According to the figures, more illegitimacy prevails in Austria and less in Greece than in any other countries. In Victoria, illegitimacy appears to be less prevalent than in fourteen and more so than in six of the countries.

507. It will be readily supposed that a larger proportion of illegitimacy prevails in Melbourne and suburbs than in any other district of Victoria, and that the proportion in the country districts is the smallest of all. In 1884, in the metropolitan district about 1 birth in 15, in extra-metropolitan towns 1 birth in 26, but in country districts only 1 birth in 46, was registered as illegitimate. In the previous year the proportions were 1 in 14, 1 in 17, and 1 in 44 respectively.

508. To ascertain the relative fruitfulness of women in different countries, it is necessary to compare the number of married women at the reproductive ages with the legitimate births. This can be done in the case of Victoria, New South Wales, Queensland, and New Zealand; but not in that of the other Australasian colonies, as in the returns of the latter

* Dictionary of Statistics, page 51.

no distinction is made between the infants born in and those born out of wedlock. By means of such a comparison in regard to the four colonies named, it would appear that the highest degree of fecundity exists in New South Wales, and the lowest in Victoria, this being probably owing to the fact that the married women are, on the average, younger in the former and older in the latter than in the other two colonies. The following table shows the number of married women under 45 years of age, the number of legitimate births in the census year, and the proportion of such births to such women in each of the four colonies:—

PROPORTION OF BIRTHS TO MARRIED WOMEN IN AUSTRALASIAN COLONIES.*

Colony.	Married Women under 45 Years of Age.	Legitimate Births, 1881.	
		Total Number.	Number per 100 Married Women under 45.
1. New South Wales ...	80,473	27,730	34·46
2. Queensland ...	24,183	7,875	32·56
3. New Zealand ...	57,464	18,198	31·67
4. Victoria ...	84,831	25,763†	30·37†

Children to a marriage in Victoria.

509. Another method of determining the fecundity of women is to find the average number of children born to a marriage, which may be ascertained approximately by dividing the legitimate births in any year by the number of marriages in the preceding year. The following is the result of such a calculation for Victoria during the eleven years ended with 1884:—

CHILDREN TO A MARRIAGE, 1874 TO 1884.

Year.	Legitimate Births.	Marriages in Year prior to that in first Column.	Average number of Children to a Marriage.
1874 ...	25,816	4,974	5·19
1875 ...	25,941	4,925	5·27
1876 ...	25,794	4,985	5·17
1877 ...	25,000	4,949	5·05
1878 ...	25,478	5,103	4·99
1879 ...	25,535	5,092	5·01
1880 ...	24,894	4,986	4·99
1881 ...	25,763	5,286	4·87
1882 ...	25,476	5,896	4·32
1883 ...	26,249	6,309	4·16
1884 ...	27,612	6,771	4·08
Sums and Mean ...	283,558	59,276	4·78

* The Government Statistician of Tasmania gives the proportion of births—including illegitimate births—to married women under 45 years in that colony in 1881 as 347 per 1,000, as compared with 326 in New Zealand, and 309 per 1,000 in Victoria during the same year.

† In consequence of the births here quoted being those for the calendar year, these figures differ slightly from those in table following paragraph 469 *ante*.

510. The figures show a steady diminution in the proportion of children born, amounting in the eleven years to more than one child per marriage. It is evident that if the births increased with the marriages as they should do, the proportions would remain steady; but this is shown not to be the case. There are, however, many matters affecting the birth rates of infants respecting which it is not possible to obtain precise information. The result is pointed out in the last column of the table, but the causes by which such a result was produced can only be guessed at.

Decrease in proportion of children born.

511. A statement of the average number of children born to a marriage in certain countries is given by Mr. Mulhall* for the period 1871-80, and his figures, together with those for Victoria as above, are as follow, placed in order, the country having the highest average being placed first, and the remainder in succession :—

Children to a marriage in various countries.

CHILDREN TO A MARRIAGE IN VARIOUS COUNTRIES.

						Births to each Marriage.
Ireland	...	...	...	...	...	5.46
Victoria	...	...	...	...	...	4.78
Scotland	...	...	...	...	...	4.43
Holland	...	...	...	...	...	4.34
Belgium	...	...	...	...	...	4.21
England	...	...	...	...	...	4.16
Sweden	...	...	...	...	...	4.01
Denmark	...	...	...	...	...	3.55
France	...	...	...	...	...	2.98

512. Ireland is at the head of the list, but it may be questioned whether this does not result from the fact that the registration of marriages there is more defective than that of births. Victoria follows close after Ireland, but this colony would sink much lower in the list if the figures of the later years were taken instead of the average of the last eleven. It may be mentioned that Mr. Mulhall gives figures to show that the number of children to a marriage is increasing in England, Ireland, Holland, and Belgium, but decreasing in the other countries named.

Position of Victoria in reference to births to a marriage.

513. According to the registrations, births in Victoria are always most numerous in the winter quarter, and next to that in the autumn quarter. The proportion of births in the spring and summer quarters varies in different years, the advantage being generally slightly in favour of the former. The following are the numbers and percentage for 1884 and the percentage for a previous decennial period :—

Births in each quarter.

* Dictionary of Statistics, page 50.

BIRTHS IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1884.		Percentage in Ten Years: 1871 to 1880.
		Number of Births.	Percentage.	
Summer ...	March ...	6,608	22·90	23·74
Autumn ...	June ...	7,309	25·34	25·10
Winter ...	September ...	7,854	27·22	27·15
Spring ...	December ...	7,079	24·54	24·01
	Year ...	28,850	100·00	100·00

Births in each quarter in various countries.

514. In the following table the proportion of births occurring in each quarter in Victoria are compared with that proportion in the opposite, and consequently corresponding, quarters (so far as seasons are concerned) in certain countries of the northern hemisphere. The figures for such countries have been taken from Mr. Mulhall's work* :—

PERCENTAGE OF BIRTHS IN EACH QUARTER IN VARIOUS COUNTRIES.

Countries.	Quarter ending on the last day of—			
	March in Victoria, September in other Countries.	June in Victoria, December in other Countries.	September in Victoria, March in other Countries.	December in Victoria, June in other Countries.
Victoria ...	Per Cent. 23·7	Per Cent. 25·1	Per Cent. 27·2	Per Cent. 24·0
England ...	24·0	23·8	26·2	26·0
France ...	24·0	24·1	27·0	24·9
Germany ...	25·0	24·9	25·9	24·2
Sweden ...	23·7	25·7	26·8	23·8
Italy ...	23·7	24·7	27·5	24·1
Russia ...	24·7	23·7	25·6	26·0

Quarters in which most and fewest births occur.

515. It appears that in most countries the largest number of births take place in what may be called the winter quarter (ending September in Victoria, March in other countries), the exception being Russia, in which most births occur in the quarter ending June. Fewest births occur in what may be called the summer quarter (ending March in Victoria, September in other countries), except in Germany, where the proportion in the quarter ending June is the smallest, and in England and Russia, where it is the smallest in the quarter ending December.

Deaths, 1884.

516. The deaths registered in 1884 numbered 13,505, as against 13,006 in 1883. The increase in the year under notice was thus 499.

Deaths, 1884 and former years.

517. Deaths were more numerous in 1884 than in any previous year except 1882, 1876, and 1875. The high mortality in the two last-named years, in which respectively 13,561 and 15,287 deaths were recorded, was due to the prevalence of measles and scarlatina in an epidemic form.†

* Dictionary of Statistics, page 49.

† For the number of deaths during each year since the first settlement of Port Phillip, see Statistical Summary of Victoria (first folding sheet) ante.

518. The births in 1884 exceeded the deaths by 15,345, or 114 per cent., as against 112 per cent. in 1883. In the nineteen years ended with 1884 the proportion averaged 121 per cent. The following were the births and deaths in each of those nineteen years, and the excess of the former over the latter :—

EXCESS OF BIRTHS OVER DEATHS, 1866 TO 1884.

Year.	Births.	Deaths.	Excess of Births over Deaths.	
			Numerical.	Centesimal.
1866 ...	25,010	12,286	12,724	104
1867 ...	25,608	11,733	13,875	118
1868 ...	27,243	10,067	17,176	171
1869 ...	26,040	10,630	15,410	145
1870 ...	27,151	10,420	16,731	161
1871 ...	27,382	9,918	17,464	176
1872 ...	27,361	10,831	16,530	153
1873 ...	28,100	11,501	16,599	144
1874 ...	26,800	12,222	14,578	119
1875 ...	26,720	15,287	11,433	75
1876 ...	26,769	13,561	13,208	97
1877 ...	26,010	12,776	13,234	104
1878 ...	26,581	12,702	13,879	109
1879 ...	26,839	12,120	14,719	121
1880 ...	26,148	11,652	14,496	124
1881 ...	27,145	12,302	14,843	121
1882 ...	26,747	13,634	13,113	96
1883 ...	27,541	13,006	14,535	112
1884 ...	28,850	13,505	15,345	114
Total in 19 years	510,045	230,153	279,892	122

519. It will be noticed that the births more than doubled the deaths in all the years except 1882, 1876, and 1875.

520. Of the Australasian colonies, New Zealand is the one in which the births have always exceeded the deaths by the highest proportion. This is due to the high birth rate and low death rate prevailing in that colony, both of which are favoured by the circumstance that an abnormally large proportion of the population, resulting from the number of immigrants introduced at the expense of the State,* consists of persons at the reproductive period of life, which, being also the strongest, is that at which fewest deaths occur. The low death rate is no doubt also promoted by the salubrity of the climate of New Zealand, but still more so by the circumstance of the population being spread over the country or dispersed throughout a number of small towns, instead of being to a great extent crowded into a few large cities, as is too much the case in the other colonies. The position of

* In the eleven years 1873 to 1883, 102,612 State-assisted immigrants arrived in New Zealand. This number is equivalent to nearly one-fifth of the total population on the 31st December, 1883 (540,877).

Victoria in regard to the proportionate increase of births over deaths is above that of Tasmania, but below that of the other colonies. The following table shows the percentage of excess of births over deaths in each of the Australasian colonies during the respective years 1874 to 1883, both inclusive. The colonies are arranged in order, that with the highest mean percentage being placed first, and that with the lowest last:—

**EXCESS OF BIRTHS OVER DEATHS IN AUSTRALASIAN COLONIES,
1874 TO 1883.**

Colony.	Excess of Births over Deaths.										
	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	Mean of 10 Yrs.
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
1. New Zealand ...	209	153	230	260	283	224	256	241	233	217	231
2. South Australia	124	84	132	167	148	177	162	167	147	152	146
3. New South Wales	156	109	108	142	135	164	151	151	132	155	140
4. Western Australia	80	61	140	111	121	138	144	144	153	89	118
5. Queensland ...	128	63	99	113	75	145	172	148	99	96	114
6. Victoria ...	119	75	97	104	109	121	124	121	96	112	108
7. Tasmania ...	83	49	82	58	106	111	104	126	112	101	93

Excess of
births over
deaths in
European
countries.

521. The following table shows the mean annual percentage of excess of births over deaths during a series of years in certain European countries:—

EXCESS OF BIRTHS OVER DEATHS IN EUROPEAN COUNTRIES.

Country.	Years over which the Average extends.		Mean Annual Excess of Births over Deaths.
	Number.	Period.	
England and Wales ...	23	1853 to 1875	Per Cent. 57
Scotland ...	22	1855 to 1876	59
Ireland ...	11	1865 to 1875	57
Denmark ...	26	1850 to 1875	57
Sweden ...	26	1850 to 1875	56
Austria ...	23	1853 to 1875	28
Prussia ...	23	1853 to 1875	40
The Netherlands ...	23	1853 to 1875	36
France ...	23	1853 to 1875	8
Spain ...	10	1861 to 1870	25
Italy ...	13	1863 to 1875	23

Excess of
births over
deaths in
Australia
and else-
where.

522. It will be observed that deaths bear a much larger proportion to births in every one of those countries than they do in any of the Australasian colonies, part of which difference is probably due to the Australian climate being more healthy and the circumstances of the colonies more favorable to longevity, and part to the fact that the countries named contain a larger proportion than the colonies of the young

and the very old. The proportionate excess of births over deaths is highest in Scotland, next highest in England, Ireland, Denmark, and Sweden; and lowest in France, where the births annually exceed the deaths by only 8 per cent.*

523. In Victoria, deaths of males in 1884 numbered 7,675, and deaths of females, 5,830. These numbers furnish a proportion of 76 females to every 100 males, as against a proportion of 75 in 1883, and an average also of 75 in the ten years 1871-80. Females in the total population were in the proportion of 88 to every 100 males in 1884, of 89 in 1883, and of about 87 during the decennium; therefore more males and fewer females died than their relative numbers in the population might have given reason to expect.

524. The following table shows the death rate of males and females, and of both sexes, during each of the past twenty-four years. It will be noticed that the death rate in all the years, except 1861 and 1862, bore more hardly upon males than upon females:—

ANNUAL DEATH RATE, 1861 TO 1884.

Year.	Estimated Mean Population.		Number of Deaths.		Deaths per 1,000 of the Mean Population.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.†
1861 ...	324,988	214,836	6,124	4,398	18·84	20·47	19·49
1862 ...	322,916	225,164	5,900	4,180	18·27	18·56	18·39
1863 ...	325,680	237,280	5,646	3,856	17·34	16·25	16·88
1864 ...	335,272	251,178	5,202	3,685	15·51	14·67	15·15
1865 ...	347,083	264,135	6,158	4,303	17·74	16·29	17·11
1866 ...	353,941	275,097	7,016	5,270	19·82	19·16	19·53
1867 ...	359,642	284,634	6,613	5,120	18·39	17·99	18·21
1868 ...	367,752	295,340	5,865	4,202	15·95	14·23	15·18
1869 ...	379,396	307,806	6,221	4,409	16·40	14·32	15·47
1870 ...	392,159	321,036	6,114	4,306	15·59	13·41	14·61
1871 ...	403,319	333,686	5,845	4,073	14·49	12·21	13·46
1872 ...	409,081	344,117	6,308	4,523	15·42	13·14	14·38
1873 ...	412,597	352,914	6,565	4,936	15·91	13·99	15·02
1874 ...	416,725	360,931	6,994	5,228	16·78	14·48	15·72
1875 ...	419,779	367,558	8,563	6,724	20·40	18·29	19·42
1876 ...	422,931	373,627	7,716	5,845	18·24	15·64	17·02
1877 ...	427,727	380,878	7,345	5,431	17·17	14·26	15·80
1878 ...	433,153	388,313	7,179	5,523	16·57	14·22	15·46
1879 ...	438,563	395,467	7,033	5,087	16·04	12·86	14·53
1880 ...	446,445	403,898	6,610	5,042	14·81	12·48	13·70
1881 ...	456,107	412,835	7,024	5,278	15·40	12·78	14·16
1882 ...	468,468	422,062	7,900	5,734	16·86	13·59	15·31
1883 ...	483,960	433,350	7,410	5,596	15·31	12·91	14·18
1884 ...	501,640	444,460	7,675	5,830	15·30	13·12	14·27
Average of twenty-four years ...					16·77	14·97	15·94

NOTE.—In 1861, 1866, and 1875, and to a certain extent in the preceding and in the succeeding years, the death rate was swelled by epidemics of measles and scarlatina.

* See also paragraph 477 ante.

† For total of mean population in each year, see table "Breadstuffs Available for Consumption," in Part Production post; for total number of deaths, see Statistical Summary (first folding sheet) at the commencement of this work; or the totals may be obtained by adding the males and females together.

Normal
death rate.

525. It has been held by high authority* that in countries in which the climate is healthy, hygiene properly attended to, and the population in a normal condition as regards age, the ordinary mortality incident to human nature would probably cause the death rate to be in the proportion of about 17 per 1,000 persons living. It should, however, be borne in mind that death rates based merely upon the total population, in common with birth and marriage rates calculated upon a like basis, are not always fair tests of the state of a community. If the proportion of very young or old people is high, the death rate will be also high; but if, on the other hand, the number of persons at the middle ages is excessive, the death rate will be low. It will be remarked that the mortality exceeded 17 per 1,000 seven times in the twenty-four years named in the table, but over the whole period it has averaged below 16 per 1,000. In the last eight years it has never been so high as 16 per 1,000, whilst in five of those years it was but little above, and in one even below, 14 per 1,000.

Low mor-
tality in
census
years 1871
and 1881.

526. In 1871 the death rate of both males and females was the lowest recorded during the whole period of twenty-one years, after which and the death rate in 1880 the next lowest death rate was in 1881; it has thus happened that the last two census years, viz., 1871 and 1881, were years of exceptionally low mortality. Such a circumstance occurring at two successive census periods is apt to mislead those who attempt, without due allowance, to base conclusions upon the relation which exists between the number of deaths and the population of the colony, as derived from the results of the census years alone.

Death rate,
1884 and
previous
years.

527. The death rate of both males and females in 1884 was much below the average. A reference to the last table will show that the death rate of males, which was about the same as in 1883, was lower than in any of the previous years named, except 1880 and 1871; whilst the death rate of females was lower than in any of the years except 1883, 1881, 1880, 1879, and 1871. Taking the mean of the two sexes, the mortality in 1884 was slightly above that in 1883, also above that in 1881, 1880, and 1871, but no other years.

Death rates
in Austral-
asian colo-
nies.

528. The proportion which the deaths that occurred in each Australasian colony bore to the total population of that colony during each of the nineteen years from 1865 to 1883 will be found in the following table :—

* See page ix of the late Dr. Farr's letter dated 5th February, 1875, published in the Supplement to the 35th Annual Report of the Registrar-General of England. London: Eyre and Spottiswoode, 1875. Also *Victorian Year-Book*, 1875, paragraph 342; *Victorian Year-Book*, 1876-7, paragraph 169; and *Victorian Year-Book*, 1877-8, paragraph 271.

DEATH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1883.*

Year.	Number of Deaths per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queensland	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865	16.97	16.41	21.42	14.30	...	13.40	15.13
1866	19.37	17.47	25.67	17.20	...	13.79	12.86
1867	18.06	19.64	17.80	17.48	...	14.48	12.78
1868	15.00	15.83	17.36	14.41	...	14.70	11.94
1869	15.47	14.05	16.20	12.37	...	13.20	11.73
1870	14.61	13.27	14.59	13.94	...	13.88	11.13
1871	13.46	12.54	14.83	12.87	...	13.38	10.13
1872	14.38	14.11	14.97	15.33	14.02	13.79	11.68
1873	15.02	13.84	16.06	13.48	16.24	14.52	12.67
1874	15.72	15.12	17.98	17.05	18.74	16.21	13.05
1875	19.42	18.09	23.80	19.45	17.88	20.00	15.92
1876	17.02	18.11	18.82	16.28	14.18	16.54	12.66
1877	15.80	15.28	17.29	13.99	15.70	19.17	11.47
1878	15.46	15.88	20.41	15.44	14.07	15.66	11.01
1879	14.53	14.29	14.97	14.09	14.46	15.18	12.46
1880	13.70	15.57	13.59	14.85	13.24	16.12	11.46
1881	14.16	15.12	15.02	14.49	13.80	14.77	11.13
1882	15.31	16.03	17.99	15.15	14.16	15.79	11.19
1883	14.18	14.52	18.82	14.83	17.93	17.06	11.45
Means	15.67	15.54	17.77	15.11	15.37	15.35	12.20

529. Considerable fluctuations in the death rates will be noticed from year to year, there being in this respect evidently some connexion between the different colonies, especially those on the Australian continent. Thus a high rate of mortality prevailed in all the continental colonies in 1866 and 1867 (in Queensland extending also to 1868), which was caused by the presence of a severe epidemic of measles and scarlatina; Tasmania and New Zealand appear on this occasion to have escaped, as their death rates were not affected. Moreover, in 1875-6 a high death rate—caused by the same complaints—also occurred in all the colonies of the group. In like manner, low death rates prevailed in all the colonies about 1870 and 1871, extending in the case of some of them to 1872, also about 1880 and 1881.

Fluctuations in the death rate coincident in different colonies.

530. In the nineteen years over which the observations extend, the normal death rate of 17 per 1,000 persons living was reached in Queensland eleven times, in Victoria, New South Wales, and South Australia four times, in Tasmania three times, and in New Zealand not at all. In the last twelve of those years it was reached three times in

Normal death rate in colonies.

* For the number of deaths in the various colonies during the twelve years ended with 1884, see General Summary of Australasian Statistics (third folding sheet) *ante*.

Western Australia. Queensland is the only colony in which, over a series of years, the death rate has exceeded 17 per 1,000.

Order of colonies in respect to death rates.

531. Over a series of years Victoria had a higher death rate than any other Australasian colony except Queensland, but in 1883 its death rate was below that of any other colony except New Zealand. The following is the order of the colonies in reference to their respective death rates; the colony with the highest rate being placed first, and that with the lowest last:—

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO DEATH RATES.

Order in 1883.	Order over a Series of Years.
1. Queensland.	1. Queensland.
2. Western Australia.	2. Victoria.
3. Tasmania.	3. New South Wales.
4. South Australia.	4. Western Australia.
5. New South Wales.	5. Tasmania.
6. Victoria.	6. South Australia.
7. New Zealand.	7. New Zealand.

Death rate in Australia and Australasia.

532. The death rate of the colonies situated upon the continent of Australia taken in combination, and the death rate of those colonies with the addition of Tasmania and New Zealand, are shown in the following table for the eleven years ended with 1883:—

DEATH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1883.

Year.	Number of Deaths per 1,000 of Mean Population.	
	Continent of Australia.	Australia with Tasmania and New Zealand.
1873	14·43	14·20
1874	15·73	15·36
1875	19·08	18·63
1876	17·12	16·37
1877	15·23	14·77
1878	15·72	14·94
1879	14·06	13·84
1880	14·47	14·01
1881	14·62	14·01
1882	15·81	14·99
1883	14·96	14·43
Means	15·57	15·05

Normal death rate in Australia and Australasia.

533. It will be noticed that in 1875 and 1876 the mortality on the Australian continent exceeded 17 per 1,000, but in no other years; also that it exceeded that rate upon the continent combined with the colonies

of Tasmania and New Zealand only in 1875. It will further be noticed that since 1878 the rates were usually below 15 per 1,000, and in 1883 were somewhat below the average.

534. The following table shows the death rates in as many British colonies outside Australasia as the particulars are available for. In many cases the average extends only over a short period, and in few, if any, of the colonies are the conditions affecting the duration of human life similar to those prevailing in the Australasian group :—

Death rates
in certain
British
possessions.

DEATH RATES IN BRITISH POSSESSIONS.

Colonies.	Years.	Number of Deaths per 1,000 of the Population.
Ceylon	1867-76	21·62
Straits Settlements	1873-7	19·96
Hong Kong	1879-81	28·00
Mauritius	1871-7	28·34
Seychelles	1875-7	22·40
St. Helena	1871-5	13·21
Bermudas	1871-5	24·07
British Guiana	1871-9	34·47
West Indies—		
Bahamas	1874-5	22·60
Jamaica	1878-80	24·10
St. Lucia	1869-79	28·40
St. Vincent	1870-9	28·40
Barbadoes	1872-8	23·76
Grenada	1871-5	27·82
Antigua	1875-6	32·87
Montserrat	1874-5	20·44
Dominica	1871-6	18·53
Trinidad	1871-6	34·14

535. In all the European countries of which the information is at hand, except Norway and Ireland, the mean annual death rates are much higher than in any of the Australasian colonies. In Norway the average rate is lower than, and in Ireland it is apparently the same as, in Queensland ; but this may perhaps not really be the case as regards the latter, it being an admitted fact that the registrations of Ireland are defective. With the exception of Norway and Ireland, it will be observed from the following table that in not one of the countries do the figures in any year show an approach to so low a death rate as 17 per 1,000, except Sweden, during the three years 1871 to 1873, and only in one of these did the rate actually fall as low as 17 per 1,000 ; whilst in Hungary, on the other hand, the average death rate per 1,000, extending over a series of years, amounts to considerably more than twice that proportion :—

Death rates
in European
countries.

DEATH RATES IN EUROPEAN COUNTRIES, 1868 to 1882.

Years.	Number of Deaths per 1,000 of Mean Population.														
	England and Wales.	Scotland.	Ireland.*	Denmark.	Sweden.	Norway.	Austria.	Hungary.	German Empire.†	Belgium.	The Netherlands.	France.	Switzerland.	Spain.	Italy.
1868	21·8	21·2	15·8	19·3	21·0	...	28·5	33·8	27·4	21·7	24·8	24·1	...	32·6	30·6
1869	22·3	23·0	16·4	19·1	22·3	...	28·9	32·0	26·1	21·8	23·0	23·5	...	32·6	27·9
1870	22·9	22·2	16·7	19·1	19·8	...	29·3	32·6	27·3	23·3	25·8	28·3	25·8	30·1	29·9
1871	22·6	22·2	16·4	19·5	17·2	16·9	29·9	39·0	28·8	28·5	29·5	34·8	27·2	...	30·0
1872	21·3	22·3	18·1	18·4	16·3	16·6	32·7	42·3	29·0	23·2	25·8	22·0	22·2	...	30·8
1873	21·0	22·4	18·3	18·6	17·2	16·9	38·1	65·1	28·3	21·5	24·2	23·3	22·7	...	30·1
1874	22·2	23·3	17·3	20·0	20·3	18·2	31·7	42·6	26·7	20·5	22·7	21·4	22·3	...	30·4
1875	22·7	23·4	18·5	21·0	20·2	18·8	30·0	37·2	27·6	22·7	25·6	23·1	24·0	...	30·8
1876	20·9	21·0	17·3	19·7	19·5	18·0	29·8	35·0	26·3	21·9	23·4	22·6	24·1	...	28·8
1877	20·3	20·8	17·5	18·7	18·5	16·9	31·6	36·3	26·4	21·1	22·0	21·6	23·5	...	28·2
1878	21·6	21·4	18·6	18·5	18·0	15·8	31·6	37·6	26·2	21·5	22·8	22·6	23·3	...	28·9
1879	20·7	20·2	19·6	19·8	16·9	15·0	29·9	36·4	25·6	21·9	22·4	22·5	22·6	...	29·9
1880	20·5	20·7	19·3	20·4	18·1	15·9	29·7	38·6	26·0	22·4	23·6	22·8	21·9	...	30·5
1881	18·9	19·3	17·5	18·3	17·7	16·8	30·6	35·6	25·4	21·2	21·5	22·0	22·4	...	27·6
1882	19·6	19·3	17·4	19·5	17·4	18·4	30·8	36·6	25·7	20·2	20·7	22·2	21·9	...	27·5
Means	21·3	21·5	17·6	19·3	18·7	17·0	30·9	38·7	26·9	22·2	23·9	23·8	23·4	31·8	29·5

NOTE.—The mortality of Sweden was increased by small-pox in 1874; that of Austria by cholera in 1873; that of Hungary by cholera in 1873 and 1874; that of Prussia (now German Empire) by war in 1870 and 1871, and by cholera in 1873; that of Belgium by small-pox in 1871; that of the Netherlands by small-pox in 1871; that of France by war in 1870 and 1871.

Death rate
in United
Kingdom.

536. According to the reports of the Registrars-General of England and Scotland, the death rate of the latter country approximates very closely to that of the former, but by the registrations in Ireland it would appear that the death rate there was always considerably lower than in the other two countries. There is little doubt, however, that the Irish registrations do not express the whole truth, the effect of which is that the death rate of the United Kingdom, taken as a whole, is made in each year to seem to be somewhat lower than that of England, which, probably, is really not the case. The figures for each of the twelve years ended with 1882 were as follow:—

DEATH RATE IN THE UNITED KINGDOM, 1871 TO 1882.

Deaths per 1,000 of the Population.				Deaths per 1,000 of the Population.			
1871	...	...	22·6	1878	...	...	21·2
1872	...	...	20·9	1879	...	...	20·5
1873	...	...	20·8	1880	...	...	20·4
1874	...	...	21·6	1881	...	...	18·7
1875	...	...	22·2	1882	...	...	19·2
1876	...	...	20·5				
1877	...	...	20·0				
				Mean	...	...	20·7

* The registrations in Ireland are admitted to be defective.—See 11th Detailed Report of the Registrar-General of Ireland, page 15; also his 12th Report, page 31.

† The figures for the years from 1868 to 1871 refer to Prussia only.

537. In every country the death rate is higher in towns than it is in the extra-urban districts. This circumstance, although no doubt partly attributable to the superior healthfulness and immunity from contagion prevailing in the latter, is also to a great extent due to the fact that hospitals and charitable institutions, which are frequented by patients from the country as well as by town residents, are generally situated in the towns; and further, that outside of charitable institutions many persons die who have come from the country on the approach of serious illness for the sake of the superior nursing and medical attendance to be obtained in town. In 1884, the death rate was higher in Melbourne and suburbs than in the country towns, but in both it was much more than twice as high as in the country districts. The following are the figures for that year:—

Death rates in town and country, 1884.

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1884.

Districts.	Estimated Mean Population.	Deaths, 1884.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	322,690	6,628	20·54
Extra-metropolitan Towns	190,636	3,570	18·74
Country districts ...	432,774	3,307	7·64
Total ...	946,100	13,505	14·27

538. The number of deaths per 1,000 of the estimated population of the metropolitan towns (Greater Melbourne), the extra-metropolitan towns, and the country districts of Victoria is given in the following table for each of the last twelve years:—

Death rate in town and country, 1873 to 1884.

DEATH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1884.

Years.	Number of Deaths per 1,000 of the Estimated Population.			
	Greater Melbourne.	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873 ...	19·86	18·50	9·65	15·02
1874 ...	21·27	20·47	9·09	15·71
1875 ...	25·82	26·03	11·24	19·42
1876 ...	21·84	23·00	10·45	17·02
1877 ...	21·18	20·07	9·86	15·80
1878 ...	20·12	20·21	9·83	15·46
1879 ...	19·23	18·65	9·17	14·53
1880 ...	18·70	17·65	8·13	13·70
1881 ...	19·32	19·44	7·90	14·16
1882 ...	21·02	20·24	8·93	15·31
1883 ...	19·46	18·81	8·21	14·18
1884 ...	20·54	18·74	7·64	14·27

NOTE.—In 1875, and to a certain extent in the preceding and succeeding years, the death rate was swelled by epidemics of measles and scarlatina.

Normal
death rate
in town and
country.

539. It will be noticed that in eight of the years, including the last three years, the death rate in Melbourne and suburbs was above that in the other town districts; but in the other four years the death rate in the extra-metropolitan towns was the higher. The greater mortality in proportion to population prevailing in the urban than in the country districts is very striking in all the years. In the former the mortality was invariably much above the normal 17 per 1,000 persons living, whilst in country districts it was always very considerably below that rate.

Death rates
in town
and country
districts of
England.

540. In England and Wales, during the ten years 1872-81, the death rate in urban districts was 22·7 per 1,000, and in country districts, 18·7 per 1,000; the difference between these rates being not nearly so great as in similar divisions of Victoria. Referring to the difference in the English rates, the Registrar-General remarks as follows* :—

“In comparing the urban and the rural mortalities with each other, it is important to remember that the age and sex distribution differs widely in the two populations, and that the differences tell largely in favour of the urban population, which contains a much smaller proportion of aged persons, and a much larger proportion of persons in the prime of life, also a much larger proportion of females, than does the rural population; and that, although these favorable conditions are somewhat counterbalanced by there being in towns a larger proportion of young children, whose mortality is always high, yet this disadvantage is by no means an equivalent for the above-mentioned advantages. For example, if we take the death rate in England and Wales at each age-period in the last completed decennium (1871-80) as a standard, the general annual death rate in the aggregate urban sanitary districts, including London, should have been 20·40 per 1,000, and the death rate in the aggregate rural sanitary districts should have been 22·83 per 1,000, while the death rate in the whole of England and Wales was 21·27. In other words, on the hypothesis that the urban and rural districts were equally healthy, the death rate in the former should have been 4·09 per cent. below that of England and Wales, and the death rate in the latter 7·33 per cent. above it.”

Death rates
in Mel-
bourne and
suburbs.

541. The following table shows the mean population, the number of deaths, and the proportion of the latter to the former, in 1884, also the number of deaths to every 1,000 persons living during the period of ten years commencing with 1871 and ending with 1880, in each of the different municipalities and other sub-districts forming the component parts of the district of Melbourne and suburbs (Greater Melbourne). In order to render the rates of the various districts comparable as far as possible, the deaths in hospitals and similar institutions have been eliminated from the districts where they occurred, and are shown separately near the end of the table :—

* See 45th Report of the Registrar-General of England, page xvi.

DEATHS IN GREATER MELBOURNE.

Sub-districts.	Year 1884.			Ten Years: 1871 to 1880.
	Estimated Mean Population.	Deaths.		Annual Deaths per 1,000 of Population.
		Total Number.	Number per 1,000 of the Population.*	
Melbourne City	66,507	1,093	16·43	16·71
Hotham Town	18,750	389	20·75	17·34
Fitzroy City	23,400	450	19·23	18·63
Collingwood City	25,631	540	21·07	20·14
Richmond City	26,662	477	17·89	17·44
Brunswick Borough	8,396	135	16·08	14·62
Northcote Borough†	2,000	27	13·50	...
Prahran City	27,000	437	15·96	16·89
South Melbourne City	32,500	526	16·18	16·53
Port Melbourne Borough	9,350	169	18·08	17·46
St. Kilda Borough	14,678	190	12·94	14·01
Brighton Borough	5,353	71	13·26	14·00
Essendon Borough	5,020	54	10·76	17·84
Flemington and Kensington Borough	4,157	57	13·71	
Hawthorn Borough	7,919	101	12·75	16·94
Kew Borough	4,888	54	11·05	11·84
Footscray Borough	7,780	149	19·15	16·75
Williamstown Borough	9,374	166	17·71	17·94
Remainder of district	18,266	269	14·72	11·85
<i>Hospitals, asylums, &c.</i> ‡... ..	3,581	1,240	...	...
Shipping in Hobson's Bay and river	1,478§	34	...	4·09
Total	322,690	6,628	20·54	20·39

542. It will be observed that in 1884 the death rate in eight of the sub-districts, viz., Hotham Town, Fitzroy, Collingwood, and Richmond Cities, and Brunswick, Port Melbourne, and Footscray Boroughs, and the "Remainder of district," was above the average of the decennial period, the excess being especially large in the case of Hotham, Brunswick, Footscray, and the "Remainder of district." On the other hand, in Hawthorn, Essendon and Flemington, and St. Kilda, the rate of mortality in 1884 was much below the average.

Death rates
in 1884 and
series of
years.

543. The only sub-district which, according to the average of ten years, had a higher death rate than 20 per 1,000, is the low-lying and still imperfectly drained locality of Collingwood; the next highest

Places in
which death
rate was
highest and
lowest.

* In order to compare the death rate with density of population, see paragraph 122 *ante*.

† Formerly included with "Remainder of district."

‡ Includes the Melbourne, Alfred, Lying-in, Children's, and Homœopathic Hospitals, the Immigrants' Home, and the Carlton Lunatic Asylum (closed in 1873)—all situated in Melbourne City; the Benevolent Asylum, which is on the boundary between Hotham Town and Melbourne City; the Metropolitan Lunatic Asylum, which is in Kew Borough; and the Yarra Bend Lunatic Asylum and the Austin Hospital for Incurables, which are in "Remainder of district."

§ Census figures.

death rate prevailed in the neighbouring city of Fitzroy, the next in the shipping borough of Williamstown, and the next in the rural boroughs of Essendon and Flemington. In 1884 the highest death rate was in Collingwood, followed by Hotham, Fitzroy, Footscray, Port Melbourne, Richmond, and Williamstown, in the order named; but the rates in Essendon and Flemington were comparatively low. During the period of ten years, after the shipping, the lowest death rate was in Kew and the "Remainder of district"; the next in Brighton and St. Kilda; and the next in Brunswick. In 1884 the lowest rates were in Essendon* and Kew; then in Hawthorn, St. Kilda, Northcote, Flemington, and the "Remainder of district."

Sub-districts
with death
rates over
17 per 1,000.

544. The death rate of Greater Melbourne taken as a whole, in the calculation of which the deaths in charitable institutions are included, was $20\frac{1}{2}$ per 1,000 persons living in 1884, or only a fraction higher than the average during the period of ten years. During the last-named period the annual death rate was over 17 per 1,000 in 7 out of the 18 sub-districts, viz., Collingwood, Fitzroy, Williamstown, Essendon and Flemington, Port Melbourne, Richmond, and Hotham; and during 1884 it was over 17 per 1,000 in all those sub-districts, except Essendon and Flemington. It will be borne in mind that the deaths in hospitals, asylums, &c., are excluded from the returns of individual districts.

Death rates
in Australasian
capitals.

545. In the census year, the death rate of Melbourne was below that in Adelaide or Hobart but was above that of Sydney or Brisbane, as is shown by the following figures. The suburbs are in all cases included:—

DEATH RATES IN AUSTRALASIAN CAPITALS, 1881.

						Deaths per 1,000 of the Population.
Adelaide	...	...	...	...	...	23·55
Hobart	...	...	...	...	...	23·18
Melbourne	...	...	...	...	...	19·32
Sydney	...	...	...	...	...	19·12
Brisbane	...	...	...	...	...	18·82

Death rates
in Perth and
Wellington.

546. No information is obtainable respecting the capital of Western Australia. The death rate of Wellington in the census year is given as 13·79 per 1,000, but as the deaths in hospitals of non-residents are not included in the calculation, the figures are not comparable to those in the other metropolitan towns.

Death rates
in towns of
United
Kingdom.

547. The average mortality of Greater Melbourne is lower than that of most towns in the United Kingdom. In the following list, which

* It is probable that the population in Essendon is over-estimated, and this would tend to unduly lower the death rate.

shows the death rate of 23 such towns, the only town with a lower average death rate than it is Portsmouth :—

DEATH RATES IN 23 BRITISH TOWNS, 1870 TO 1879.

Annual Deaths per 1,000 of the Population.		Annual Deaths per 1,000 of the Population.	
Manchester ...	29·9*	Birmingham ...	24·4
Dublin ...	29·6	Glasgow ...	24·2*
Liverpool ...	29·1	Hull ...	24·0
Salford ...	27·8	Norwich ...	23·8
Newcastle-on-Tyne ...	26·6	Bristol ...	23·7
Leeds ...	26·5	Nottingham ...	23·2
Oldham ...	26·5	London ...	22·8
Sheffield ...	25·8	Plymouth ...	22·3
Bradford ...	25·7	Edinburgh ...	20·8*
Leicester ...	25·2	Brighton ...	20·8
Wolverhampton ...	24·7	Portsmouth ...	20·2
Sunderland ...	24·6		

548. The death rate in Greater Melbourne over a series of years is also lower than that in any of the 45 colonial and foreign towns named in the following list, except San Francisco, Christiania, St. Louis, and Philadelphia :—

DEATH RATES IN 45 COLONIAL AND FOREIGN TOWNS, 1878-80.†

Annual Deaths per 1,000 of the Population.		Annual Deaths per 1,000 of the Population.	
Vera Cruz ...	70·5	Bordeaux ...	26·7
Valparaiso ...	64·6	New York ...	26·2
St. Petersburg ...	51·4	Leipsic ...	26·1
Havanna ...	45·7	Turin ...	25·6
Rio Janeiro ...	39·4	Dresden ...	25·4
Madras ...	38·8	Stockholm ...	24·7
Madrid ...	37·4	Lyons ...	24·7
Montreal ...	37·2	Hamburg ...	24·5
Buda-Pesth ...	35·2	Bucharest ...	24·5
Bombay ...	33·7	Brussels ...	23·9
Breslau ...	32·5	Amsterdam ...	23·7
Rouen ...	31·3	Boston ...	23·5
Calcutta ...	31·1	Rotterdam ...	23·3
Mexico ...	30·9	Quebec ...	22·9
Milan ...	30·6	Venice ...	22·7
Buenos-Ayres ...	30·1	Copenhagen ...	22·1
Vienna ...	29·0	Geneva ...	21·2
Paris ...	28·6	Baltimore ...	21·1
Palermo ...	28·5	Philadelphia ...	20·3
Marseilles ...	28·0	St. Louis ...	19·3
Berlin ...	27·6	Christiania ...	18·8
Chicago ...	27·2	San Francisco ...	18·1
Rome ...	26·8		

549. Of the 5 principal towns in Victoria next in importance to Melbourne, 2 had in 1884 higher, and 3 had lower, death rates than that city. In none of them, however, was the death rate as high as in

* Average of years 1876 to 1879.

† Taken from Mulhall's *Dictionary of Statistics*, page 126.

the majority of British and Foreign towns just referred to, as will be seen by the following figures:—

DEATH RATES IN 6 VICTORIAN TOWNS, 1884.

	Deaths per 1,000 of the Population.		Deaths per 1,000 of the Population.
Stawell ...	22·50	Melbourne ...	20·54
Sandhurst ...	22·13	Geelong ...	20·27
Castlemaine ...	20·70	Ballarat ...	15·70

Deaths in each month.

550. The mortality of Victoria is usually highest in the first five months and in the last month of the year. The relative mortality of the various months fluctuates, however, in different years. According to the average of a series of years, the months in which most deaths occur appear to be January, March, April, and February, in the order named; but in the year under review more deaths occurred in December than in January, and more in September than in either February, March, or April. The number of deaths in each month of 1884, and their percentage to the total number in the year, also the percentage of the deaths in each month of the decennium ended with 1880 to the total number of deaths during the same period, will be found in the following table:—

DEATHS IN EACH MONTH.

Months.	Year 1884.		Percentage in Ten Years: 1871 to 1880.
	Number of Deaths.	Percentage.	
January ...	1,192	8·83	10·29
February ...	1,004	7·43	9·09
March ...	1,092	8·09	10·17
April ...	1,163	8·61	9·73
May ...	1,108	8·20	8·55
June ...	1,053	7·80	7·44
July ...	1,146	8·49	7·89
August ...	1,183	8·76	7·37
September...	1,049	7·76	6·81
October ...	1,070	7·92	7·09
November ...	1,141	8·45	7·12
December ...	1,304	9·66	8·45
Total ...	13,505	100·00	100·00

Deaths at different seasons.

551. In Victoria the summer is the most trying portion of the year, especially to invalids and young children. It is not astonishing, therefore, that most deaths occur during that period. Next to the summer the autumn quarter is the most fatal, probably in part owing to the circumstance that some who had become debilitated during the summer linger

on for some months later. In the United Kingdom, on the contrary, the greatest mortality occurs in the winter, and the least in the summer quarter. A statement of the relative mortality of the different seasons in Victoria, according to the experience of the past year and a previous decennium; in England and Wales, according to the experience of thirty-one years; in Scotland, according to the experience of ten years; and in Ireland, according to the experience of five years; together with the mean temperature in each quarter in Melbourne and Greenwich, will be found in the following table:—

RELATIVE MORTALITY OF EACH QUARTER IN VICTORIA, ENGLAND, SCOTLAND, AND IRELAND.

Seasons.*	Melbourne, Victoria.	Greenwich, England.	Deaths per 100 at all Seasons.				
			Victoria.		England and Wales.	Scotland.	Ireland.
	Mean Temperature in Shade.	Year 1884.	Average of Ten Years: 1871 to 1880.	Average of Thirty-one Years.	Average of Ten Years.	Average of Five Years.	
Summer ...	65·2	60·5	24·35	29·55	23·24	22·34	20·21
Autumn ...	53·8	44·3	24·61	25·72	24·65	24·71	23·45
Winter ...	50·2	40·0	25·01	22·07	27·49	27·95	30·19
Spring ...	60·3	52·8	26·03	22·66	24·62	25·00	26·15
Year ...	57·6	49·4	100·00	100·00	100·00	100·00	100·00

552. The deaths of Chinese recorded in 1884 amounted to 197, all males, and those of Aborigines to 26. The former furnishes a proportion of 16·3 and the latter of 33·3 to every 1,000 of their numbers.† At the same time the proportion of deaths of all races to every 1,000 of the population was 14·27.

Deaths of
Chinese
and Abori-
gines.

553. The mortality of the Chinese would doubtless have been higher but for the fact that the Chinese population in Victoria consists almost entirely of persons at the middle or strongest period of life. In 1884, with the exception of seven infants or children under 5 years, not one of the Chinese who died was under 25 years of age, the oldest was said to be over 80; the majority, or more than two-thirds, were between 45 and 65. Of the Aborigines who died, four were under 5, and one was stated to have attained the age of 75.

Ages at
death of
Chinese and
Aborigines.

* The summer, autumn, winter, and spring seasons in Victoria approximate to the quarters ending on the last day of March, June, September, and December respectively; and in the United Kingdom to those ending on the last day of September, December, March, and June respectively.

† On the 3rd April, 1881, the Chinese numbered 12,128; Aborigines, 780.

Deaths at
each age,
1884.

554. The following table shows the number of deaths at various periods of age registered in Victoria during the year 1884, and the proportion of the deaths at each age to the total at all ages :—

DEATHS AT EACH AGE, 1884.

Ages.	Number of Deaths at each Age, 1884.			Percentage of Deaths at each Age.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years ...	2,668	2,248	4,916	34·76	38·55	36·40
5 years to 10 years ...	225	224	449	2·93	3·84	3·32
10 " 15 " ...	132	116	248	1·72	1·99	1·84
15 " 20 " ...	204	213	417	2·66	3·65	3·09
20 " 25 " ...	291	321	612	3·79	5·51	4·53
25 " 35 " ...	479	496	975	6·24	8·51	7·22
35 " 45 " ...	529	454	983	6·89	7·79	7·28
45 " 55 " ...	943	556	1,499	12·29	9·54	11·10
55 " 65 " ...	1,018	461	1,479	13·27	7·91	10·95
65 " 75 " ...	753	417	1,170	9·81	7·15	8·66
75 years and upwards ...	433	324	757	5·64	5·56	5·61
Total ...	7,675	5,830	13,505	100·00	100·00	100·00

Proportion of
deaths at
different
ages.

555. It will be noticed that over a third of the males and nearly two-fifths of the females who died had not reached their fifth year, that nearly a fourth of the males and nearly a third of the females were between 5 and 45 years of age, that more than a fourth of both males and females were between 45 and 65 years of age, and that more than a fourth of the males and about a sixth of the females were over 65 years of age; also that, on the average, the females who died were about 10 years younger than the males—about half the former being under and half over 25 years of age, whilst about half the latter were under and half over 35 years of age.

Death rate
at each age.

556. The exact ages of the population of Victoria were ascertained at the census of 1881, and since then they have been brought on by means of the records of the births, of the deaths at each age, and of the net immigration, and thus an opportunity is afforded of calculating the death rates of males and females at different ages. Such results for 1884 are given in the following table, and are compared with the average rates which prevailed during the ten years 1871-80, the increase or decrease at each age being also shown :—

DEATH RATE AT EACH AGE, 1871-80 AND 1884.*

Ages.	Number of Deaths per 1,000 of the Population at different Ages.					
	Males.			Females.		
	Mean of 10 Years : 1871 to 1880.	1884.	Increase + Decrease —	Mean of 10 Years : 1871 to 1880.	1884.	Increase + Decrease —
Under 5 years ...	47·34	45·27	— 2·07	42·19	39·53	— 2·66
5 to 10 „ ...	6·10	3·94	— 2·16	6·00	4·05	— 1·95
10 to 15 „ ...	3·30	2·37	— ·93	3·30	2·12	— 1·18
15 to 20 „ ...	4·43	3·63	— ·80	4·29	3·96	— ·33
20 to 25 „ ...	5·38	5·35	— ·03	5·39	6·17	+ ·78
25 to 35 „ ...	7·60	7·19	— ·41	8·50	8·10	— ·40
35 to 45 „ ...	12·18	11·17	— 1·01	11·76	10·75	— 1·01
45 to 55 „ ...	18·67	17·31	— 1·36	14·31	14·60	+ ·29
55 to 65 „ ...	31·24	29·52	— 1·72	24·20	23·47	— ·73
65 to 75 „ ...	60·47	58·50	— 1·97	48·10	52·81	+ 4·71
All ages (Usual death rate)	16·45	15·30	— 1·15	14·15	13·12	— 1·03
All ages (Absolute death rate)†	21·79	20·53	— 1·26	18·33	18·35	+ ·02

557. It has already been stated that in 1884 the death rate of both males and females was below the average. The above table shows this to have been the case as regards males at every age-period. As regards females, however, the death rate was above the average at the age-periods 20 to 25, 45 to 55, and 65 to 75.

Death rate at each age 1884 compared with average of previous years.

558. It will be observed that two lines of figures are set down in the space for “All ages” at the foot of the table. The figures in the first line, representing what may be called the “Usual death rate,” are obtained by comparing the number of deaths of either sex with the number of the same sex living; and are identical, so far as 1884 is concerned, with the figures for that year given in the lowest line of the table following paragraph 524 ante. This mode of computing the death rate of a population, as has often been pointed out in the *Victorian Year-Book*—although that adopted in every country which publishes Vital Statistics—gives results which are misleading for the purpose of comparing the mortality of one country with that of another, or the mortality of a country at one period with the mortality of the same country at another period, unless the proportions living at different ages are identical in the two countries or at the two periods respecting which it is desired to make comparisons, which is seldom if ever the

Usual and absolute death rates

* For population at each age in 1884, see table following paragraph 93 ante; the deaths at each age, are given in table following paragraph 554 ante.

† The figures in this line represent the death rates which would have occurred assuming an equal number to have been living at each quinquennial age-period up to 75; and, as will be seen, differ entirely from the usual death rates given in the line above, which have been calculated upon the total numbers of either sex living.

case. Therefore a mode of computing the death rate of the population as a whole, with due allowance for age, or what may be called the "Absolute death rate," has been adopted, and the resulting figures are given in the second line.

Mode of
computing
absolute
death rate.

559. The "Absolute death rate" has been calculated in the following manner:—The proportions given in the columns per 1,000 of the population at every quinquennial period of age and twice those at every decennial period of age have been added, and their sum compared with the sum of numbers of 1,000 for every quinquennial and of 2,000 for every decennial period of age, the first total being considered to represent the deaths and the second the population. It is, in fact, a mean of the death rates arranged according to quinquennial ages, and will be better illustrated by the following example, showing how the "Absolute death rate" at the foot of the second column (Males—mean of 10 years: 1871 to 1880) has been obtained:—

MODE OF COMPUTING "ABSOLUTE DEATH RATE."

Ages.	Males 1871 to 1880.	
	Population.	Deaths.
QUINQUENNIAL AGE-PERIODS.		
Under 5 years	1,000	47·34
5 to 10 "	1,000	6·10
10 to 15 "	1,000	3·30
15 to 20 "	1,000	4·43
20 to 25 "	1,000	5·38
DECENNIAL AGE-PERIODS.		
25 to 35 years	2,000	15·20
35 to 45 "	2,000	24·36
45 to 55 "	2,000	37·34
55 to 65 "	2,000	62·48
65 to 75 "	2,000	120·94
Total	15,000	326·87

Absolute
death rate.

560. It is thus shown that, if the male mortality which occurred during the ten years 1871 to 1880 had been experienced by a population of 15,000 males under 75 years of age symmetrically distributed as to age, viz., 200 at each year of age, or 1,000 at each five-year period of age, or 2,000 at each ten-year period of age, there would have been 326·87 deaths, or a proportion of 21·79 to every 1,000. This proportion, according to the definition already given, is the absolute death rate, and is available for forming a correct comparison with a proportion similarly obtained relating to the other sex or to any other period or country, no matter what may have been the differences of age between the sexes at the two periods, or in the two countries. It should be mentioned that

the age of 75 is the highest taken into the computation, as, in most countries, the deaths and population are generally tabulated in quinquennial or decennial periods up to, but not beyond, that age; and, moreover, the higher ages may safely be left out of account, since, although the death rate at such ages is high, the number living over 75 in a normal population usually amounts to only about 1 per cent.

561. Comparing the death rates at all ages as given in the table by the two modes of computation, it is found that in 1884, whilst the mortality of males was 115 per 100,000 below the average according to the usual but unreliable method, it was 126 per 100,000 below the average according to the new and correct one; and that in the case of the females the mortality was 103 per 100,000 below the average according to the former method, but 2 above the average according to the latter.

Results of two methods compared.

562. In the next table the death rates of males and females at different ages in Victoria, England and Wales, and France are compared—the observations for Victoria and France being for periods of ten years, and those for England and Wales for a period of forty years:—

Death rates at various ages in Victoria, England, and France.

DEATH RATE AT EACH AGE IN VICTORIA, ENGLAND, AND FRANCE.

Ages.	Number of Deaths per 1,000 of the Population.					
	Victoria.		England and Wales.		France.	
	Average of 10 Years: 1871 to 1880.		Average of 40 Years.		Average of 10 Years.	
	Males.	Females.	Males.	Females.	Males.	Females.
All ages (Usual death rate) ...	16.45	14.15	23.2	21.1	23.80	23.19
„ (Absolute death rate)	21.79	18.33	25.5	22.7	24.82	24.16
Under 5 years ...	47.34	42.19	71.6	61.7	84.55	75.45
5 to 10 „ ...	6.10	6.00	8.3	8.0	10.49	11.04
10 to 15 „ ...	3.30	3.30	4.6	4.8	5.36	6.41
15 to 20 „ ...	4.43	4.29	6.4	7.0	10.34	8.41
20 to 25 „ ...	5.38	5.39	8.6	8.2	10.02	9.69
25 to 35 „ ...	7.60	8.50	9.7	9.7	10.96	11.03
35 to 45 „ ...	12.18	11.76	13.2	12.2	14.76	14.88
45 to 55 „ ...	18.67	14.31	18.7	15.6	29.19	27.27
55 to 65 „ ...	31.24	24.20	32.6	28.1	60.69	63.49
65 to 75 „ ...	60.47	48.10	67.1	59.7	160.22	153.76
75 to 85 „ ...	114.80	102.94	147.2	134.3		

563. It will be observed that the average mortality of both males and females at all ages is much lower in Victoria than in England or France, but the difference is not so striking when the new method of comparison is used (absolute death rate) as it is when the old method is used (usual death rate). Thus, according to the old method, deaths of

Death rates, usual and absolute, in Victoria, England, and France.

males per 100,000 living are, in England, 670, and in France, 735, more than in Victoria, but according to the new method only 370 more in England and 303 more in France; and, according to the old method, deaths of females per 100,000 living are, in England, 690, and in France, 904, more than in Victoria, but according to the new method only 440 more in England and 583 more in France.

Death rate at certain ages higher in Victoria than in France. 564. It will further be noticed that at none of the age-periods is the mortality of either males or females as high in Victoria as in England, but it is higher than in France, in the case of males at from 35 to 65 and in the case of females at from 35 to 45.

Death rate of children less in Victoria than in England or France. 565. It is very commonly believed that the conditions of life in Victoria are more fatal to children than those conditions in older countries; but the figures in the table prove the fallacy of this opinion so far as England and France are concerned—the low mortality in Victoria, as compared with that obtaining in either of those countries, being especially marked at the age-periods under 10 years.

Death rate of males and females in three countries compared. 566. According to the table, the death rate of females exceeds that of males at from 20 to 35 in Victoria (during a term of years), at from 10 to 20 in England and Wales, and at from 5 to 15, from 35 to 55, and from 65 to 75 in France; moreover, in Victoria at from 10 to 15 years, and in England and Wales at from 25 to 35, the death rate of males and females is equal. At all other periods of life the death rate of males exceeds that of females in the countries named.

567. Mr. Mulhall gives the death rate at various ages for different countries,* and these, with the figures for Victoria—which will be found in almost every instance much lower than those for any of the other countries—are subjoined:—

DEATH RATE AT VARIOUS AGES IN DIFFERENT COUNTRIES.

	Number of Deaths per 1,000 living at each Age.						
	Under 5.	5 to 10.	10 to 25.	25 to 45.	45 to 55.	55 to 65.	65 to 75.
Victoria ...	38·6	3·5	3·9	10·2	16·2	29·1	59·4
England ...	63·6	6·6	5·5	10·2	17·4	31·8	64·3
United States ...	58·8	10·1	5·4	10·8	17·6	27·2	51·4
France ...	75·6	9·2	8·8	12·7	16·6	28·3	66·3
Prussia ...	...	9·2	6·4	11·5	18·6	33·0	64·5
Austria ...	111·7	9·8	6·6	11·3	21·1	41·5	92·8
Switzerland ...	...	8·5	6·3	11·6	19·3	38·4	82·5
Italy ...	110·6	11·6	7·8	11·7	17·3	33·1	70·1
Spain ...	106·2	11·7	8·8	12·9	23·8	42·0	95·0
Belgium ...	68·1	12·7	8·1	12·9	19·0	32·3	74·5
Sweden ...	57·6	8·0	4·8	8·2	14·7	27·4	62·6

* Dictionary of Statistics, page 127.

568. The death rate of infants in 1882 was exceptionally high, but in the two succeeding years it was below the average.* The total number who died under 1 year of age in 1884 was 3,281, and as the births numbered 28,850, it follows that 1 infant died to every 9 births, or 11·37 infants to every 100 births. In the eighteen years 1866 to 1883, the proportion of infants dying before completing their first year was 12·38 to every 100 births.*

Infantile mortality, 1884.

569. It has been already stated that more boys are born than girls, but the balance of the sexes is to a certain extent maintained by more male than female infants dying. This is shown in the following table, which contains a statement, for the fourteen years ended with 1884, of the number of births of boys and girls, the number of deaths of each before completing their first year, and the proportion of the deaths of infants of either sex to the number of births of infants of the same sex :—

Mortality of male and female infants.

MORTALITY OF MALE AND FEMALE INFANTS, 1871 TO 1884.

Year.	Births.		Deaths at under 1 Year of Age.			
			Total Number.		Number per 100 Births.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1871 ...	14,000	13,382	1,710	1,404	12·21	10·49
1872 ...	13,831	13,530	1,801	1,533	13·02	11·33
1873 ...	14,234	13,866	1,679	1,502	11·80	10·83
1874 ...	13,659	13,141	1,839	1,502	13·46	11·43
1875 ...	13,683	13,037	2,071	1,740	15·14	13·35
1876 ...	13,759	13,010	1,637	1,343	11·90	10·32
1877 ...	13,272	12,738	1,838	1,461	13·85	11·47
1878 ...	13,752	12,829	1,763	1,499	12·82	11·68
1879 ...	13,727	13,112	1,817	1,402	13·24	10·69
1880 ...	13,358	12,790	1,669	1,436	12·49	11·23
1881 ...	13,903	13,242	1,696	1,423	12·20	10·75
Sums and Means }	151,178	144,677	19,520	16,245	12·91	11·23
1882 ...	13,612	13,135	2,049	1,673	15·05	12·74
1883 ...	14,109	13,432	1,702	1,448	12·06	10·78
1884 ...	14,844	14,006	1,853	1,428	12·49	10·20

570. According to a previous paragraph,† the births of male infants in a series of years were in the proportion of about 104½ to 100 female infants, and the numbers in this table point to a proportion of 120 deaths of the former to 100 of the latter. It will be noticed that in every one of the years deaths of male infants very much exceeded those of female infants; and as the numbers living were about equal (the excess, if any, being slightly in favour of male infants), the greater tendency of

Mortality of male greater than of female infants.

* See table following paragraph 577 post.

† See paragraph 489 ante.

boys than of girls to die before completing one year of life may be considered to be invariable.

571. In proportion to every 1,000 born, the number of male infants dying varied from 118 in 1873 to 151 in 1875, and that of female infants dying from 103 in 1876 to 134 in 1875—the mean number dying per 1,000 births during the eleven years ended with 1881 being 129 of the former and 112 of the latter. The high mortality of infants in 1875 was caused by an epidemic of measles. The next year was one in which the general mortality was much increased by an epidemic of scarlatina, but infants under 1 year appear not to have been at all affected thereby, as their mortality in 1876 was remarkably low. The high infantile mortality in 1882 was exceptional, as in that year no such epidemics were prevalent. It was not sustained in 1883 or 1884, the infantile mortality in those years having been lower than in most of the preceding ones.

572. In classifying the deaths of infants, those are distinguished which occur at under 1 month of age, at from 1 to 3 months, at from 3 to 6 months, and at from 6 to 12 months. The numbers of these during 1884 and the eleven years ended with 1881 are shown in the following table, together with the proportion of deaths at each of those periods of age and the number at each such period to every 100 births. It will be noticed that in 1884 the mortality of males from 1 to 6 months and of females from 1 to 3 months was above, but that at all other periods under 1 year was below, the average:—

AGE AT DEATH OF MALE AND FEMALE INFANTS.

Ages.		Deaths at under 1 Year of Age.				
		Year 1884.			Average of 11 Years, 1871 to 1881.	
		Number.	Percentage at each Age.	Number per 100 Births.	Percentage at each Age.	Number per 100 Births.
Boys.						
Under 1 month	...	598	32·27	4·03	34·23	4·42
1 to 3 months	...	335	18·08	2·26	17·30	2·23
3 to 6	„	399	21·53	2·69	19·43	2·51
6 to 12	„	521	28·12	3·51	29·04	3·75
Total	...	1,853	100·00	12·49	100·00	12·91
GIRLS.						
Under 1 month	...	419	29·34	2·99	30·81	3·46
1 to 3 months	...	294	20·59	2·10	17·23	1·94
3 to 6	„	293	20·52	2·09	20·14	2·26
6 to 12	„	422	29·55	3·02	31·82	3·57
Total	...	1,428	100·00	10·20	100·00	11·23

Proportion of infants dying to births.

Deaths of infants at different ages.

573. During the period of eleven years, as well as in 1884, the deaths of male infants exceeded those of female infants at each of the age-periods. This was more especially the case in the first month of life, when the excess of the former was fully a third; in the next two months this excess was reduced to about a fifth, in the next three months to about a seventh, and in the next six months to something less than a tenth.

More deaths of male than female infants at all ages.

574. Over a third of the male and nearly a third of the female infants who died before they were a year old did so in the first month after birth; about a sixth of both males and females died in the next two months; about a fifth of both males and females died in the next three months; between a third and a fourth of the males and nearly a third of the females died in the next six months. The proportions for 1884 show no material difference in this respect.

Periods at which infants die.

575. More male infants died in the first month of life than in the whole of the second six months, but the female infants who died in the second six months slightly exceeded those who died in the first month.

Deaths in first month and second six months of life.

576. As a practical result of these calculations, it may be mentioned that of every 20,000 newly-born boys and girls in equal numbers, 442 of the former and 346 of the latter may be expected to die before they are a month old; 223 more boys and 194 more girls may be expected to die between 1 month and 3 months of age; 251 more boys and 226 more girls between 3 and 6 months; 375 more boys and 357 more girls between 6 and 12 months. At the end of a year it is probable that 1,291 of the boys and 1,123 of the girls will have died, and 8,709 of the former and 8,877 of the latter will be still living.

Probable mortality of infants.

577. It has been pointed out in previous issues of this work that, in proportion to the infants born, the number who die before completing one year of life is greater in South Australia* than in any of the other Australasian colonies. This was also the case in 1883, although the proportion in that colony was below the average. It was also below the average in Victoria and New South Wales slightly, but above it in Queensland, Tasmania, and New Zealand, as will be seen by the following table, which gives the number of births, the number of deaths of infants under one year, and the proportion of the latter to the former, in each of the colonies of the group, except Western Australia (which does not publish any statement of the number of infants who die), for each of the eighteen years ended with 1883. All the calculations were made in the office of the Government Statist, Melbourne:—

Infantile mortality in Australasian colonies.

* The high infantile death rate in South Australia was first pointed out in a paper, by the present writer, read before the Adelaide Philosophical Society (now the Royal Society of South Australia) on the 19th March, 1878. Up to that date the fact seems to have been entirely unsuspected, and its announcement caused considerable discussion, together with some alarm, in that colony.

INFANTILE MORTALITY IN AUSTRALASIAN COLONIES.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
	VICTORIA.			NEW SOUTH WALES.			QUEENSLAND.		
1866	25,010	3,838	15.35	16,950	1,939	11.44	4,127	690	16.72
1867	25,608	3,534	13.80	18,317	2,269	12.39	4,476	578	12.91
1868	27,243	3,054	11.21	18,485	1,791	9.69	4,460	552	12.38
1869	26,040	3,284	12.61	19,243	1,858	9.66	4,654	528	11.35
1870	27,151	3,203	11.80	19,648	1,867	9.50	4,905	526	10.72
1871	27,382	3,114	11.37	20,143	1,812	9.00	5,205	516	9.91
1872	27,361	3,334	12.19	20,250	2,116	10.45	5,265	578	10.98
1873	28,100	3,181	11.32	21,444	1,985	9.26	5,720	701	12.26
1874	26,800	3,341	12.47	22,178	2,428	10.95	6,383	776	12.16
1875	26,720	3,811	14.26	22,528	2,695	11.96	6,706	1,025	15.28
1876	26,769	2,980	11.13	23,298	2,629	11.28	6,903	994	14.40
1877	26,010	3,299	12.68	23,851	2,785	11.68	7,169	1,058	14.76
1878	26,581	3,262	12.27	25,328	3,126	12.34	7,397	1,234	16.68
1879	26,839	3,219	11.99	26,933	2,886	10.72	7,870	917	11.65
1880	26,148	3,105	11.86	28,162	3,200	11.36	8,196	865	10.55
1881	27,145	3,119	11.49	28,903	3,341	11.56	8,220	918	11.17
1882	26,747	3,722	13.91	29,702	3,897	13.12	8,518	1,188	13.95
1883	27,541	3,150	11.44	31,281	3,590	11.48	9,890	1,319	13.34
Sums and means }	481,195	59,550	12.38	416,644	46,214	11.09	116,064	14,963	12.89
	SOUTH AUSTRALIA.			TASMANIA.			NEW ZEALAND.		
1866	6,782	1,178	17.37	2,805	264	9.41	8,466	849	10.03
1867	7,041	1,254	17.81	2,971	267	8.98	8,918	873	9.79
1868	7,247	1,084	14.96	2,990	351	11.73	9,391	899	9.57
1869	6,976	911	13.06	2,859	291	10.18	9,718	957	9.85
1870	7,021	1,031	14.68	3,054	298	9.76	10,277	956	9.30
1871	7,082	961	13.57	3,053	260	8.52	10,592	882	8.33
1872	7,105	1,145	16.12	3,010	306	10.17	10,795	1,074	9.95
1873	7,107	990	13.93	3,048	266	8.73	11,222	1,213	10.81
1874	7,696	1,319	17.13	3,097	321	10.36	12,844	1,394	10.85
1875	7,408	1,343	18.13	3,105	407	13.11	14,438	1,816	12.58
1876	8,224	1,228	14.93	3,149	286	9.08	16,168	1,673	10.35
1877	8,640	1,212	14.03	3,211	365	11.37	16,856	1,527	9.06
1878	9,282	1,466	15.79	3,502	375	10.71	17,770	1,486	8.36
1879	9,902	1,217	12.29	3,564	384	10.77	18,070	1,941	10.74
1880	10,262	1,393	13.57	3,739	420	11.23	19,341	1,805	9.33
1881	10,708	1,364	12.74	3,918	405	10.34	18,732	1,731	9.24
1882	10,844	1,647	15.19	4,043	419	10.36	19,009	1,678	8.83
1883	11,173	1,627	14.56	4,259	528	12.40	19,902	1,995	10.02
Sums and means }	150,500	22,370	14.86	59,377	6,213	10.46	251,809	24,749	9.83

Order of colonies in respect to infantile mortality.

578. The colonies named in the table stand in the following order in regard to the death rate of infants—the colony with the lowest average death rate being placed first, and the one with the highest last. The second and third colonies have nearly the same average rates, as also

have the fourth and fifth, whilst the rate in South Australia is much the highest :—

ORDER OF COLONIES IN REFERENCE TO INFANTILE MORTALITY.

1. New Zealand.	4. Victoria.
2. Tasmania.	5. Queensland.
3. New South Wales.	6. South Australia.

579. It appears from the figures in the last table that a wave of high infantile mortality spread in 1882 over the four continental colonies, but did not reach Tasmania and New Zealand until the following year, when the infantile death rate in the former was the highest with one exception, and in the latter with four exceptions, during a period of eighteen years. By 1883 this wave had entirely subsided in Victoria and New South Wales, but only partially so in Queensland and South Australia.

580. In England and Wales, the infantile mortality, although higher than in any of the colonies, is only slightly above that in South Australia, deaths at under 1 year of age having occurred during the ten years 1873 to 1882 in the proportion of 14·6 to every 100 births. In Scotland, the infantile death rate, during the four years 1870 to 1873, was a fraction higher than that in Victoria, being in the proportion of 12·55 to every 100 births. In Ireland, during the three years 1875 to 1877, the returns show only 9·5 deaths of infants to 100 births, but the registrations of Ireland are admittedly so defective that but little reliance can be placed on calculations based thereon. In France, during the year 1879, infants under 1 year died in the proportion of 15·7 per 100 births, or a higher rate than in the United Kingdom or any of its divisions. In the urban districts of France the proportion was 17·5, and in the rural districts 15·0, per 100 births. The percentage of illegitimate infants who died was 29·8, whilst that of legitimate infants was only 14·7.*

581. The infantile mortality of large towns is naturally always above that in country districts. Thus the deaths at under 1 year of age in Melbourne and suburbs (Greater Melbourne) during the twelve years ended with 1884 averaged 17 per 100 births, whilst in the extra-metropolitan districts of Victoria the mortality of infants at the same period of life averaged only 10 per 100 births. The following table shows the death rate of infants in the metropolis and in the other districts of the colony during each of the twelve years named :—

* See Mons. E. Cheysson's paper on the mortality of infants, *Journal de la Société de Statistique de Paris* for January, 1883, page 7.

INFANTILE MORTALITY IN AND OUTSIDE OF GREATER MELBOURNE,
1873 TO 1884.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.	
		Greater Melbourne.			Victoria, outside Greater Melbourne.		
1873 ...	8,007	1,277	15·95	20,093	1,904	9·48	
1874 ...	7,946	1,480	18·63	18,854	1,861	9·87	
1875 ...	8,227	1,546	18·79	18,493	2,265	12·25	
1876 ...	8,202	1,339	16·33	18,567	1,641	8·84	
1877 ...	8,295	1,407	16·96	17,715	1,892	10·68	
1878 ...	8,636	1,297	15·02	17,903	1,965	10·98	
1879 ...	8,829	1,467	16·61	18,010	1,752	9·73	
1880 ...	8,645	1,439	16·65	17,503	1,666	9·52	
1881 ...	9,237	1,514	16·39	17,908	1,605	8·96	
1882 ...	9,576	1,857	19·39	17,171	1,865	10·86	
1883 ..	10,093	1,603	15·89	17,448	1,547	8·87	
1884 ...	10,911	1,832	16·79	17,939	1,449	8·08	
Sums and means }	106,604	18,058	16·94	217,604	21,412	9·84	

Infantile mortality in English towns,

582. As compared with the births, the infantile mortality of Greater Melbourne is, on the average, higher than that of Portsmouth, London, Brighton, Bristol, Plymouth, or Wolverhampton, but is less than that of fourteen other English towns of which particulars are available. The following are the towns in question, arranged in order according to the infantile death rate prevailing within their respective limits; the town with the lowest death rate being placed first, and that with the highest last. It is a remarkable fact that a low infantile death rate prevails in London, whilst that in Liverpool is higher than in any other large town in England:—

INFANTILE MORTALITY IN TWENTY TOWNS OF ENGLAND,
1870 TO 1879.

	Deaths under 1 Year of Age to 100 Births.			Deaths under 1 Year of Age to 100 Births.	
Portsmouth	14·4	Nottingham ...	...	18·4
London	16·0	Salford ...	...	18·6
Brighton	16·1	Manchester ...	...	19·0
Bristol	16·2	Norwich ...	...	19·1
Plymouth	16·3	Bradford ...	...	19·1
Wolverhampton	16·9	Leeds ...	...	19·5
Sunderland	17·0	Leicester ...	...	21·9
Birmingham	17·7	Liverpool ...	...	22·2
Hull	17·8			
Sheffield	17·9			
Oldham	17·9			
Newcastle-on-Tyne	18·1			
			Mean of towns named		17·4

583. In the Lying-in Hospital, Melbourne, 542 children were born alive during the year ended with 30th June, 1884, and of these, 50, or over 9 per cent., died before leaving the institution, 14 having died within 48 hours of their birth. In the previous year, 7 per cent.; in 1881-2 (18 months), 11½ per cent.; in the year 1880, 5½ per cent.; in 1879, 8 per cent.; in 1878, 6½ per cent.; in 1877, 7 per cent.; and in 1876 and 1875, 9 per cent., of the infants born in the Lying-in Hospital died therein. It may be pointed out, however, that in consequence of the bad class of cases which come to maternity hospitals for treatment the infants who die in such institutions, in proportion to the numbers born, are, all over the world, in excess of a similar proportion outside.

Deaths of infants in Lying-in Hospital.

584. In the year 1884, deaths of male children under 5 years of age numbered 2,668, and deaths of female children under that age numbered 2,248—the former being in the proportion of about 35 per cent. and the latter of about 39 per cent. to the total number of deaths at all ages. These proportions are considerably below the average, and are lower than those for any other year since 1870 except 1883 and 1881. The following table shows the number of such deaths at each year of age and their proportion to the deaths at all ages in 1884 and in each of the previous thirteen years :—

Deaths of children under 5.

DEATHS OF CHILDREN UNDER 5 YEARS OF AGE, 1871 TO 1884.

Years.	Years of Age at Death (last birthday).					Total Deaths under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion per 100 Deaths at All Ages.
MALES.							
1871 ...	1,710	463	135	79	77	2,464	42·15
1872 ...	1,801	486	155	120	102	2,664	42·23
1873 ...	1,679	456	186	146	97	2,564	39·06
1874 ...	1,839	504	184	159	128	2,814	40·43
1875 ...	2,071	917	383	234	217	3,822	44·78
1876 ...	1,637	511	312	261	210	2,931	38·04
1877 ...	1,838	512	216	123	108	2,797	38·08
1878 ...	1,763	465	176	140	87	2,631	36·65
1879 ...	1,817	353	159	117	94	2,540	36·12
1880 ...	1,669	414	156	103	74	2,416	36·55
1881 ...	1,696	357	141	102	72	2,368	33·71
Means ...	1,775	494	200	144	115	2,728	39·40
1882 ...	2,049	400	134	87	92	2,762	34·96
1883 ...	1,702	358	123	114	95	2,392	32·28
1884 ...	1,854	457	162	113	82	2,668	34·76

DEATHS OF CHILDREN UNDER 5 YEARS OF AGE, 1871 TO
1884—continued.

Years.	Years of Age at Death (last birthday).					Total Deaths under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion per 100 Deaths at All Ages.
FEMALES.							
1871 ...	1,404	413	136	94	68	2,115	51·93
1872 ...	1,533	473	155	106	94	2,361	52·20
1873 ...	1,502	427	160	132	119	2,340	47·41
1874 ...	1,502	472	171	135	99	2,379	45·58
1875 ...	1,740	864	408	256	169	3,437	51·22
1876 ...	1,343	469	275	217	177	2,481	42·46
1877 ...	1,461	484	171	148	102	2,366	43·57
1878 ...	1,499	481	204	108	95	2,387	43·22
1879 ...	1,402	353	156	100	89	2,100	41·28
1880 ...	1,436	386	143	89	51	2,105	41·75
1881 ...	1,423	331	124	95	65	2,038	38·61
Means ...	1,477	468	191	135	103	2,374	45·93
1882 ...	1,673	358	121	94	86	2,332	40·67
1883 ...	1,448	310	125	86	68	2,037	36·40
1884 ...	1,428	423	182	128	87	2,248	38·56

More boys
die than
girls.

585. During the eleven years ended with 1881, deaths of male children under 5 numbered 30,011, and deaths of female children under 5 numbered 26,109, and thus the former exceeded the latter by 3,902, or by 15 per cent. The deaths of male children in all the years bore a smaller proportion to the total deaths of males than the deaths of female children did to the total deaths of females, a circumstance no doubt mainly due to the small proportion of old people in the female as compared with that in the male population. In 1884 the mortality of boys under 5 amounted to 39 per cent., and that of girls under 5 amounted to 36 per cent., of the whole mortality of their respective sexes. In none of the years did the former exceed 45 per cent., or the latter exceed 50 per cent., of that mortality. The epidemic period, the centre of which was 1875, is easily recognised by the increased mortality which occurred thereat.

Number of
children
under 5 and
their deaths

586. The average number of male and female children at each year of age under 5 living, during the period of eleven years ended with 1881, are compared in the next table with the average number of deaths of children of the same sexes at those ages which occurred annually during that period:—

NUMBER AND DEATHS OF CHILDREN UNDER 5 YEARS OF AGE,
1871 TO 1881.

Age last Birthday.	Males.				Females.			
	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Per-centage of Deaths at each age.	Number of Deaths per 1,000 Children living.	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Per-centage of Deaths at each age.	Number of Deaths per 1,000 Children living.
0 ...	12,152	1,775	65·07	146·07 *	11,809	1,477	62·22	125·07 *
1 ...	11,228	494	18·11	43·99	11,004	468	19·71	42·53
2 ...	11,943	200	7·33	16·75	11,635	191	8·04	16·42
3 ...	11,807	144	5·28	12·20	11,469	135	5·69	11·77
4 ...	11,261	115	4·21	10·21	11,138	103	4·34	9·25
Total ...	58,391	2,728	100·00	46·72	57,055	2,374	100·00	41·61

587. During the period to which the table refers, the mean number of children of both sexes under 5 living was 115,446, and the mean number of deaths of such children was 5,102, whence it results that 44 in every 1,000 children under 5, or about 1 in 23, died annually. In every 1,000 boys the proportion who died annually was 47, or 1 in 21; in every 1,000 girls it was 42, or 1 in 24.

Proportion of children dying annually.

588. Of every 1,000 boys under 1 year of age, 146, and of every 1,000 girls under 1 year of age, 125, died annually. These are larger proportions than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 129 deaths of male infants and 112 deaths of female infants to every 1,000 births of infants of those sexes respectively.†

Proportion of infants dying annually.

589. In proportion to their respective numbers in the population, more boys than girls died at every year of age, the difference per 1,000 living being as much as 21 at under 1,‡ but only about 1½ at from 1 to 2, and less than 1 at subsequent ages.

More boys died than girls.

590. According to the figures, deaths of boys under 1 year of age furnish a larger proportion to the total deaths of boys under 5 than deaths of girls under 1 do to the total deaths of girls under 5, but the reverse is the case at each of the years of age after the first.

Boys and girls dying under 1.

591. Of the whole number of children who died before they attained the age of 5, nearly two-thirds, viz., 65 per cent. of the boys and 62 per cent. of the girls, were under 1 year of age; less than a fifth of the boys and about a fifth of the girls were between 1 and 2; about a fourteenth of the boys and about a twelfth of the girls were between 2

Proportion of deaths of children at each age.

* These results, being based upon infants living instead of births, are naturally in excess of those in total line of last column of table following paragraph 572 ante.

† See table following paragraph 572 ante.

‡ See also paragraph 573 ante.

and 3; 1 in 19 of the boys and 1 in 18 of the girls were between 3 and 4; 1 in 24 of the boys and 1 in 23 of the girls were between 4 and 5.

Probable mortality of children under 5.

592. It results from actuarial calculations based upon the figures in this and a previous table* that of every 20,000 boys and girls in equal numbers born in Victoria, 1,291 boys and 1,123 girls may be expected to die before they complete a year of life, 374 more boys and 369 more girls before they complete 2 years, 138 more boys and 139 more girls before they complete 3 years, 99 more boys and 98 more girls before they complete 4 years, and 83 more boys and 76 more girls before they complete 5 years. At the end of that period it is probable that 1,985 of the boys and 1,805 of the girls will have died; and 8,015 of the boys and 8,195 of the girls will be still living.

Deaths of octogenarians.

593. The persons who died at the age of 80 or upwards numbered 378 in 1884, as against 355 in 1883, 380 in 1882, and 358 in 1881. Those in 1884 consisted of 221 males and 157 females. 22 of the males and 12 of the females had passed the age of 90, and 5 of the males and 1 of the females had passed the age of 100. The following are the exact ages of such persons in the four years named and in the ten years ended with 1880 :—

DEATHS OF OCTOGENARIANS, 1871 TO 1884.

Years of Age.	Year 1884.		Year 1883.		Year 1882.		Year 1881.		Ten Years, 1871-80.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
80	47	27	29	30	38	31	42	23	211	121
81	20	13	12	16	34	16	35	24	100	74
82	31	12	40	26	44	17	17	18	102	79
83	18	11	34	23	20	17	21	16	80	59
84	32	31	21	13	22	16	22	11	93	68
85	19	17	16	13	16	11	13	6	78	64
86	12	8	10	3	13	15	11	14	52	47
87	6	10	5	4	4	7	10	11	55	35
88	9	7	10	5	4	10	1	4	47	34
89	5	9	2	3	2	5	2	6	33	20
90	5	1	5	5	8	4	4	7	22	30
91	3	...	2	1	2	2	3	6	7	10
92	1	2	1	4	3	3	6	4	12	14
93	1	3	3	3	2	2	1	3	8	5
94	4	...	1	3	3	1	4	2	10	6
95	1	2	2	2	1	...	3	...	13	9
96	1	1	1	...	...	...	2	...	9	4
97	1	1	...	...	...	...	...	...	3	4
98	...	1	...	...	...	1	...	...	5	2
99	...	...	...	3	...	...	2	...	6	...
100	3	...	1	...	1	1	...	1	2	4
101	1	1	...	...	...	...	...	...	1	2
102	...	...	1	...	1	...	...	...	3	...
103	...	...	2	...	...	1	...	1	1	1

* See paragraph 576, also table following paragraph 572, *ante*, from which probable deaths at under 1 year of age have been deduced. Probability of deaths at other ages under 5 has been calculated from the numbers in the last table.

DEATHS OF OCTOGENARIANS, 1871 TO 1884—*continued.*

Years of Age.	Year 1884.		Year 1883.		Year 1882.		Year 1881.		Ten Years, 1871-80.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
104	...	...	...	...	...	...	...	...	2	1
105	...	...	...	...	...	...	1	...	1	...
106	1	...	...	...	2	...	...	...	...	1
110	...	...	...	...	...	...	...	1	...	...
114	...	...	...	...	...	...	...	...	...	1
Unspecified	...	...	...	...	...	...	...	...	135*	98*
Total	221	157	198	157	220	160	200	158	1,091	793

594. In the 10 years ended with 1880, 1,091 males and 793 females Deaths of octogenarians, 1871 to 1880. died in Victoria at the age of 80 or upwards. The deaths of males and females at all ages during the same period numbered 70,158 and 52,412 respectively, therefore 1 male in every 64, and 1 female in every 66, lived to be upwards of 80 years of age. In the 8 years ended with 1880, that age was attained by 956 males, or 1 in 61, and by 695 females, or 1 in 63. In the same 8 years, 105 of the males, or 1 in 552, and 94 of the females, or 1 in 466, lived to be 90 years of age or upwards; and 10 of the males, or 1 in 5,800, and 10 of the females, or 1 in 4,382, lived to be upwards of 100 years of age.

595. The average age at death in 1884 was 29·89 years, or 29 years Average age at death. and 11 months. For males the average age was 32·24 years, or 32 years and 3 months, and for females, 27·50 years, or 27 years and 6 months. Until 1881, the average age at which both males and females die in Victoria had a tendency to advance from year to year, but since then it has remained tolerably steady, as will be seen by the following figures :—

AVERAGE AGE AT DEATH IN VICTORIA.

	Males.	Females.
	Years.	Years.
23 years—1852 to 1875	...	...
Year 1875	21·70	15·01
„ 1876	24·28	18·23
„ 1877	26·81	21·84
„ 1878	28·60	23·06
„ 1879	29·54	23·24
„ 1880	30·65	24·71
„ 1881	30·72	25·35
„ 1882	32·63	25·98
„ 1883	32·04	26·58
„ 1884	33·13	27·55
„ 1884	32·24	27·50

596. The causes of death in Victoria, as in the United Kingdom, Classification of causes of death. are arranged in classes and orders, according to the system proposed by the late Dr. William Farr, F.R.S., then of the General Register Office,

* These figures are those relating to the years 1871 and 1872, in which the exact ages of octogenarians were not noted.

London, in conjunction with Dr. Marc d'Espine, and first made public by the former in his report, dated 15th February, 1856, to the International Statistical Congress held in Paris in 1855-6.

Nosological Index.

597. A Nosological Index was compiled by the present writer some years since, under the sanction of the then Registrar-General, Mr. W. H. Archer, to be used in connexion with this classification, in order to facilitate the bringing of all the circumstances resulting in death under one or other of the heads in the list, also for the guidance of deputy registrars in receiving, and of medical men in supplying, information respecting the causes of death, and of officers of charitable and other public institutions in preparing statistical tables of the deaths and sickness occurring therein.*

Victorian index used throughout Australasia.

598. Since the introduction of this system into Victoria in 1861, it has been adopted in all the Australasian colonies, and, as a consequence, the Nosological Index referred to has also come into use throughout the group.†

Causes of death classified.

599. The following table shows the causes of death in classified arrangement; the total number and the number of Chinese and Aborigines who died from each cause during 1884, also the total number who died from each cause during the ten years ended with 1880:—

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT.
(Ten Years : 1871 to 1880 ; and Year 1884.)

Class.	Order.	Causes of Death.	Number of Deaths.		
			Ten Years : 1871-1880	Year 1884.	
			Total. †	Chinese.	Aborigines.
		All causes	122,570	13,505	26
		Specified causes	122,244	13,489	26
CLASSES.					
I.	...	ZYMOTIC DISEASES :—Zymotici (ζύμη, leaven). Diseases that are either epidemic, endemic, or contagious, induced by some specific body, or by the want of, or by the bad quality of, food	34,147	2,637	15
II.	...	CONSTITUTIONAL DISEASES : — Cachectici (καχεξία, bad habit of body). Sporadic diseases ; affecting several organs in which new morbid products are often deposited ; sometimes hereditary	17,227	2,245	39

* A copy of this Nosological Index was appended to the *Victorian Year-Book*, 1877-8, pp. 303 to 335.
† In New South Wales this Index has been reprinted, not only without acknowledgment, but with the addition of an ingeniously worded preface signed "E. G. Ward, Registrar-General," wherein, amongst other statements leading up to the inference that the work had been compiled either by or under the direction of Mr. Ward, a hope is expressed that the Index might be found of service not only to the officers in his Department, for whose use it was specially designed, but to the medical profession of New South Wales. However gratifying it may be to find that a work compiled in the statistical department of this colony is being used with advantage in New South Wales, disapproval must still be expressed at the unfair manner in which an officer of that colony has attempted to claim credit for its production, in which labour, as a matter of fact, no one out of Victoria had any hand whatever.
‡ The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(10 Years: 1871 to 1880; and Year 1884.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			10 Years 1871-80.	Year 1884.		
				Total. *	Chinese.	Aborigines.
CLASSES— <i>continued.</i>						
III.	...	LOCAL DISEASES:— Monorganici (μόνος, alone, without others; ὄργανον, organ). Sporadic diseases, in which the functions of particular organs or systems are disturbed or obliterated, with or without inflammation	46,446	5,890	96	11
IV.	...	DEVELOPMENTAL DISEASES:—Metamorphici (μεταμόρφωσις, change of form). Special diseases, the incidental result of the formative, reproductive, and nutritive processes	15,817	1,918	22	9
V.	...	VIOLENT DISEASES OR DEATHS:—Thanatici (θάνατοι, violent deaths). Diseases which are the evident and direct results of physical or chemical forces, acting either by the will of the sufferer, of other persons, or accidentally	8,607	799	25	1
ORDERS.						
I.	1	Miasmatic diseases:— Miasmatici (μίασμα, stain; defilement)	30,956	2,286	9	1
	2	Ethetic diseases:— Enthetici (ἐνθετος, put in; implanted)	378	50	2	...
	3	Dietic diseases:—Dietici (δίαιτα, way of life; diet)	2,079	216	3	...
	4	Parasitic diseases:— Parasitici (παράσιτος, parasite)	734	85	1	...
II.	1	Diathetic diseases:—Diathetici (διάθεσις, condition; diathesis)	4,175	585	15	1
	2	Tubercular diseases:— Phthisisici (φθίσις, wasting away)	13,052	1,660	24	3
III.	1	Brain diseases:—Cephalici (κεφαλή, head) ...	13,532	1,514	14	...
	2	Heart diseases:—Cardiaci (καρδία, heart) ...	6,804	901	27	1
	3	Lung diseases:—Pneumonici (πνεύμων, lung)	13,637	1,886	33	9
	4	Bowel diseases:—Enterici (έντερον, intestine)	9,659	1,158	17	1
	5	Kidney diseases:—Nephritici (νεφρός, kidney)	2,021	351	3	...
	6	Gennetic diseases:—Aidoici (αἰδοῖα, pudenda)	212	25	...	...
	7	Bone and muscle diseases:—Myostici (μῦς, muscle; ὀστέον, bone)	290	22	...	...
	8	Skin diseases:—Chrotici (χρῶς, skin) ...	291	33	2	...
IV.	1	Developmental diseases of children:—Paidiaci (παιδία, youth)	4,784	460	...	...
	2	Developmental diseases of women:—Gyniaci (γυνή, woman)	1,319	137	...	...
	3	Developmental diseases of old people:—Geratici (γῆρας, old age)	2,727	468	11	8

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(10 Years: 1871 to 1880; and Year 1884.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			10 Years 1871-80.	Year 1884.		
				Total *	Chinese.	Abori- gines.
ORDERS— <i>continued.</i>						
IV.	4	<i>Diseases of nutrition</i> :—Atrophici (ἀτροφία, atrophy)	6,987	853	11	1
V.	1	<i>Accident</i> :—Tychici (τύχη, chance) ...	7,447	685	18	1
	2	<i>Battle</i> :—Polemici (πόλεμος, battle; fight) ...	...	...	...	...
	3	<i>Homicide</i> :—Androphonici (ἀνὴρ, man; φονεύω, I kill)	190	25	1	...
	4	<i>Suicide</i> :—Autophonici (αὐτὸς, self; φονεύω, I kill)	951	86	6	...
	5	<i>Execution</i> :—Demiotici (δημιώτης, executioner)	19	3	...	...
DISEASES, ETC.						
I.	1	Small-pox	2	5	...	...
		Chicken-pox	13	2	...	...
		Measles	2,080	233	...	...
		Scarlatina	4,101	34	...	...
		Diphtheria	3,040	162	1	...
		Quinsy	153	9	...	...
		Croup	1,897	181	...	...
		Whooping-cough	1,974	209	...	...
		Typhoid fever, &c.	3,973	456	1	...
		Erysipelas	619	41	1	...
		Metria	461	72	...	...
		Carbuncle, boil, &c.	37	7	...	...
		Influenza, coryza, catarrh	276	23	...	...
	Dysentery	2,846	78	3	...	
	Diarrhœa	7,667	643	3	1	
	Cholera	523	39	...	...
	Ague	44	3	...	...
	Remittent fever	169	2	...	...
	Rheumatism	817	60	...	...
	Miasmatic diseases not classed	264	27	...	...
	2	Syphilis	286	43	1	...
		Gonorrhœa, stricture of the urethra	91	7	1	...
		Glanders	1	...	...	...
3	Privation	157	9	1	...	
	Want of breast-milk	1,165	122	2	...	
	Purpura and scurvy	100	7	...	...
	Alcoholism	646	77	...	...
	Other dietic diseases	11	1	...	...
4	Thrush	327	24	...	...
	Worms, &c.	15	...	...	...
	Hydatids	379	59	1	...	
	Other parasitic diseases	13	2	...	...
II.	1	Gout	133	17	...	...
		Dropsy... ..	613	65	...	1
		Cancer... ..	2,957	446	15	...

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(10 Years: 1871 to 1880; and Year 1884.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			10 Years 1871-80.	Year 1884.		
				Total *	Chinese.	Aborigines.
DISEASES, ETC.—<i>continued.</i>						
II.	1	Tumor	260	45	...	...
		Polypus	9	3	...	...
		Noma	34	1	...	...
		Mortification	131	8	...	...
		Other diathetic diseases	38	...	...	...
	2	Scrofula	451	25	...	...
		Tabes mesenterica	723	109	...	...
		Phthisis	10,155	1,359	23	3
		Hydrocephalus	1,394	133	...	...
		Other tubercular diseases	329	34	1	...
III.	1	Cephalitis	2,383	262	...	...
		Apoplexy	2,750	366	5	...
		Paralysis	1,547	198	3	...
		Insanity †	49	8	...	...
		Chorea	20	...	...	...
		Epilepsy	588	65	1	...
		Convulsions	3,390	286	1	...
		Other diseases of the nervous system	2,805	329	4	...
	2	Pericarditis	377	56	4	...
		Aneurism	785	61	3	...
		Other diseases of the circulatory system	5,642	784	20	1
	3	Laryngitis	359	61	...	...
		Bronchitis	4,588	654	4	1
		Pleurisy	811	99	3	2
		Pneumonia	5,077	759	14	3
		Congestion of the lungs, pulmonary apoplexy	1,812	215	6	2
		Asthma	392	49	3	1
		Other diseases of the respiratory system	598	49	3	...
	4	Gastritis	1,279	210	2	...
		Enteritis	2,134	213	2	...
		Peritonitis	771	96	6	...
		Ascites	184	12	...	...
		Ulceration of intestines	160	29	1	...
		Hernia	191	31	...	...
		Ileus	424	38	...	...
		Intussusception	93	15	...	...
		Stricture of intestines	44	9	1	...
		Fistula	17	2	...	...
		Stomach diseases undefined	692	60	1	...
		Pancreas disease	3	1	...	...
		Hepatitis	881	54	1	...
		Jaundice, gallstone	473	58	2	...
		Liver disease undefined	2,269	326	1	1
		Spleen disease	44	4	...	...
	5	Nephritis	218	44	...	...
		Ischuria	29	6	...	...
		Nephria	749	161	2	...
		Diabetes	146	27	...	...

* The Chinese and Aborigines are included in this column.

† Deaths from this cause are now usually returned under other heads.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(10 Years : 1871 to 1880 ; and Year 1884.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			10 Years 1871-80.	Year 1884.		
				Total *	Chinese.	Aborigines.
<i>DISEASES, ETC.—continued.</i>						
III.	5	Stone, gravel	48	13	...	...
		Cystitis	203	23	1	...
		Other diseases of the urinary organs	628	77	...	...
	6	Ovarian dropsy	44	7	...	...
		Other diseases of the generative organs	168	18	...	...
	7	Arthritis	59	3	...	...
		Ostitis, periostitis	28	6	...	...
		Other diseases of the locomotive system	203	13	...	...
	8	Phlegmon, whitlow	20	1	...	...
		Ulcer	86	14	1	...
	Other diseases of the skin	185	18	1	...	
IV.	1	Premature birth... ..	2,715	320	...	...
		Cyanosis	203	30	...	...
		Spina bifida	108	11	...	...
		Other malformations	279	29	...	...
		Teething	1,469	70	...	...
		Other developmental diseases of children	10	...	...	...
	2	Paramenia	52	6	...	...
		Childbirth	1,267	131	...	...
	3	Old age	2,727	468	11	8
	4	Atrophy and debility	6,987	853	11	1
V.	1	Fractures, contusions, &c.	3,152	313	12	1
		Wounds	262	16	1	...
		Burns and scalds	885	86	1	...
		Sunstroke	218	7	...	...
		Struck by lightning	25	1	...	...
		Poison	178	15	2	...
		Snake or insect bite	37	3	...	...
		Drowning	1,937	179	...	...
		Suffocation	625	53	2	...
		Other or unspecified accidents	128	12	...	...
	3	Murder and manslaughter	190	25	1	...
	4	Wounds	254	25	...	...
		Poison	188	14	...	...
		Drowning	217	20	...	...
		Hanging	256	22	6	...
	Suicide by other means	36	5	...	...
5	Judicial hanging	19	3	...	...
...	Causes not specified	326	16	...	...

600. The next table shows the same causes of death, arranged in the order of their fatality, during 1884, with the numbers who died from each cause in that year, and during the ten years ended with 1880, also the order of fatality of the different causes during that period :—

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN ORDER OF FATALITY.

(10 Years : 1871 to 1880 ; and Year 1884.)

Order of Fatality.		Causes of Death in Order of Fatality, 1884.	Number of Deaths	
10 Years : 1871-80.	Year 1884.		10 Years : 1871-80.	Year 1884.
1	1	Phthisis	10,155	1,359
4	2	Atrophy and debility	6,987	853
5	3	Diseases of the organs of circulation not classed	5,642	784
6	4	Pneumonia	5,077	759
3	5	Accidents	7,447	685
7	6	Bronchitis	4,588	654
2	7	Diarrhœa	7,667	643
16	8	Old age	2,727	468
9	9	Typhoid fever	3,973	456
12	10	Cancer	2,957	446
15	11	Apoplexy	2,750	366
14	12	Diseases of the nervous system not classed ...	2,805	329
19	13	Diseases of the liver not classed	2,269	326
17	14	Premature birth	2,715	320
10	15	Convulsions	3,390	286
18	16	Cephalitis	2,383	262
21	17	Measles	2,080	233
24	18	Congestion of lungs, pulmonary apoplexy ...	1,812	215
20	19	Enteritis	2,134	213
29	20	Gastritis	1,279	210
22	21	Whooping-cough	1,974	209
25	22	Childbirth and metria	1,728	203
26	23	Paralysis	1,547	198
23	24	Croup	1,897	181
11	25	Diphtheria	3,040	162
37	26	Nephria	749	161
28	27	Hydrocephalus	1,394	133
30	28	Want of breast-milk	1,165	122
38	29	Tabes mesenterica	723	109
34	30	Pleurisy	811	99
36	31	Peritonitis	771	96
31	32	Suicide	951	86
13	33	Dysentery	2,846	78
40	34	Alcoholism	646	77
41		Diseases of the urinary organs not classed ...	628	77
27	35	Teething	1,469	70
45		Malformations	590	70
43	36	Dropsy	613	65
46		Epilepsy	588	65
35	37	Aneurism	785	61
53		Laryngitis	359	61
33	38	Rheumatism	817	60
39		Diseases of the stomach not classed	692	60
51	39	Hydatids... ..	379	59
47	40	Jaundice, gall-stone	473	58
52	41	Pericarditis	377	56
32	42	Hepatitis... ..	881	54
52	43	Venereal diseases	377	50
50	44	Asthma	392	49
44		Diseases of the respiratory system not classed	598	49
58	45	Tumor	260	45
59	46	Nephritis... ..	218	44
42	47	Erysipelas	619	41
45	48	Cholera	523	39
49	49	Ileus	424	38

CAUSES OF DEATH IN ORDER OF FATALITY—*continued.*
(10 Years: 1871 to 1880; and Year 1884.)

Order of Fatality.		Causes of Death in Order of Fatality, 1884.	Number of Deaths.	
10 Years: 1871-80.	Year 1884.		10 Years 1871-80.	Year 1884.
8	} 50 {	Scarlatina	4,101	34
54		Tubercular diseases not classed	329	34
61	51	Hernia	191	31
67	52	Ulceration of intestines	160	29
57	} 53 {	Miasmatic diseases not classed	264	27
70		Diabetes	146	27
48	54	Scrofula	451	25
55	} 55 {	Thrush	327	24
62		Murder, manslaughter	190	25
56	} 56 {	Influenza, coryza, catarrh	276	23
60		Cystitis	203	23
63	} 57 {	Skin diseases not classed	185	18
66		Diseases of the organs of generation not classed	168	18
71	58	Gout	133	17
74	59	Intussusception	93	15
75	60	Ulcer	86	14
60	} 61 {	Diseases of locomotive system not classed	203	13
79		Stone, gravel	48	13
64	62	Ascites	184	12
68	} 63 {	Privation	157	6
69		Quinsy	153	9
80	} 64 {	Stricture of the intestines	44	9
72		Mortification	131	8
78	} 65 {	Insanity	49	8
73		Purpura and scurvy	100	7
44	} 66 {	Ovarian dropsy	44	7
82		Carbuncle, boil	37	7
77	} 67 {	Paramenia	52	6
84		Ischuria	29	6
85	} 68 {	Ostitis, periostitis	28	6
95		Small-pox	2	5
80	68	Spleen disease	44	4
76	} 69 {	Arthritis	59	3
80		Ague	44	3
87	} 70 {	Execution	19	3
93		Polypus	9	3
65	} 71 {	Remittent fever	169	2
88		Fistula	17	2
90	} 72 {	Chicken-pox	13	2
90		Parasitic diseases not classed	13	2
83	} 73 {	Noma	34	1
86		Phlegmon, whitlow	20	1
91	} 74 {	Dietic diseases not classed	11	1
94		Pancreas disease	3	1
81	...	Diathetic diseases not classed	38	...
86	...	Chorea	20	...
89	...	Worms	15	...
92	...	Developmental diseases of children not classed	10	...
96	...	Glanders	1	...
Deaths from specified causes			122,244	13,489
Deaths from unspecified causes			326	16
Deaths from all causes			122,570	13,505

601. The fatality of the different circumstances which cause death in this colony, as compared with the fatality resulting from similar causes in England and Wales, is shown by the following table, in which the number of persons dying from each cause in either country is compared with the number of persons living in the same country. The totals of each class and order are given, as also are some of the principal diseases. The Victorian results relate to the years 1883, 1884, and the ten years ended with 1880, and the results for England and Wales to the thirty years ended with 1879:—

Death rate from various causes in Victoria and England.

ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES AND CERTAIN DISEASES IN VICTORIA AND ENGLAND AND WALES.

Class.	Order.	Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.			
			Victoria.			England and Wales.
			Year 1884.	Year 1883.	Average of 10 Years: 1871 to 1880.	Average of 30 Years: 1850 to 1879.
		All causes	1,427·44	1,417·84	1,537·71	2,210·51
		Specified causes	1,425·43	1,416·09	1,533·91	2,189·90
		CLASSES.				
I.	...	Zymotic diseases	278·40	297·39	428·48	484·57
II.	...	Constitutional diseases	237·29	225·55	216·16	410·87
III.	...	Local diseases	622·56	589·99	582·80	872·15
IV.	...	Dévelopmental diseases	202·73	204·18	198·47	346·49
V.	...	Violent deaths	84·45	98·98	108·00	75·82
		ORDERS AND DISEASES.*				
I.	1	Miasmatic diseases	241·31	256·62	388·44	458·80
		Measles	24·63	·76	26·10	41·37
		Scarlatina	3·59	6·43	51·46	} 100·60
		Diphtheria	17·12	14·28	38·15	
		Croup	19·13	18·20	23·80	22·80
		Whooping-cough	22·09	5·23	12·22	51·90
		Typhoid fever, &c.	48·87	72·05	49·85	46·94†
		Dysentery	8·24	15·15	35·71	6·03
		Diarrhœa	67·96	96·48	96·21	87·22
		Metria (see also Child-birth and metria <i>infra</i>)	7·61	4·69	5·78	6·16
	2	Enthetic diseases (venereal diseases, &c.)	5·28	5·89	4·74	7·88
	3	Dietic diseases (privation, want of breast-milk, alcoholism, &c.)	22·83	26·27	26·09	11·83

* Particulars respecting some of the principal diseases only are given.

† The death rate from typhoid fever is given for the ten years ended with 1879. Prior to 1870, it was not separated from typhus in the English returns.

ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES AND CERTAIN
DISEASES IN VICTORIA AND ENGLAND AND WALES—*continued.*

Class.	Order.	Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.			
			Victoria.			England and Wales.
			Year 1884.	Year 1883.	Average of 10 Years: 1871 to 1880.	Average of 30 Years: 1850 to 1879.
		ORDERS AND DISEASES— <i>continued.</i>				
I.	4	Parasitic diseases (thrush, hydatids, &c.)	8·98	8·61	9·21	6·06
II.	1	Diathetic diseases ...	61·83	63·55	52·39	82·31
		Dropsy ...	6·87	6·87	7·69	34·48
		Cancer, &c. ...	47·14	53·20	36·98	38·96
	2	Tubercular diseases ...	175·46	162·00	163·77	328·56
		Phthisis ...	141·53	132·13	125·37	249·14
		Hydrocephalus ...	14·06	13·19	17·49	36·27
III.	...	Diseases of the systems—				
	1	Nervous (brain diseases, &c.)	160·03	156·33	169·80	280·80
	2	Circulatory (heart diseases, &c.)	95·23	91·24	85·37	102·38
	3	Respiratory (lung diseases, &c.)	199·34	180·42	171·12	339·02
	4	Digestive (stomach, bowels—diseases, &c.)	122·40	122·20	121·20	100·47
	5	Urinary (kidney, bladder—diseases, &c.)	37·10	32·49	25·36	29·69
	6	Generative (ovarian dropsy, &c.)	2·64	1·42	2·66	5·70
	7	Locomotive (arthritis, ostitis, &c.)	2·33	2·40	3·64	8·01
	8	Integumentary (phlegmon, ulcer, &c.)	3·49	3·49	3·65	6·08
IV.	...	Developmental diseases—				
	1	Of children (premature birth, malformation, teething, &c.)	48·73	50·91	60·03	85·00
	2	Of women ...	14·48	13·19	16·55	11·23
		Childbirth (see also Childbirth and metria <i>infra</i>)	13·85	12·54	15·90	10·79
	3	Of old people (old age) ...	49·47	52·98	34·22	133·02
	4	Diseases of nutrition (atrophy and debility)	90·05	87·10	87·67	117·24
V.	1	Accident or negligence ...	72·40	85·25	93·45	} 75·82
	3	Homicide ...	2·54	2·40	2·38	
	4	Suicide ...	9·20	11·23	11·93	
	5	Execution ...	·31	·10	·24	
I. IV.	1 } 2 }	Childbirth and metria ...	21·46	17·23	21·68	16·95

602. By means of the results shown in this table, it is found that, over a series of years, the mortality from the following causes is greater in Victoria than in England and Wales:—Dysentery, diarrhœa, typhoid fever, croup, diseases of the dietic order (including want of breast-milk and alcoholism), and diseases of the parasitic order (including thrush, hydatids, &c.); diseases of the stomach and bowels; violence; and the consequences of childbirth. From every other cause shown, also from all causes combined, the death rate is, on the average, higher in England and Wales than in Victoria.

Diseases more fatal in Victoria than in England.

603. In 1884, epidemic, endemic, contagious, and infectious diseases—technically known as zymotic—caused 278 deaths to every 100,000 persons living, or 19 fewer than in 1883, and 150 below the average of the ten years 1871–80. Most of these deaths, viz., 241 per 100,000 living, were due to miasmatic diseases, to which proportion dysentery and diarrhœa contributed 76, typhoid fever 49, croup and diphtheria* 36, measles 24, whooping-cough 22, and scarlatina nearly 4. The mortality from dysentery and diarrhœa, typhoid fever, and scarlatina, in 1884, was much lower, but that from croup and diphtheria, measles, and whooping-cough, was much higher, than in the previous year; the net result being that miasmatic diseases, on the whole, were slightly less fatal in 1884 than in 1883, as has just been stated. As compared with the average of the ten years 1871–80, the death rate from dysentery and diarrhœa, and croup and diphtheria, fell off by nearly one-half, the deaths from scarlatina per 100,000 living became reduced from 51 to only 4, and a slight falling-off also took place under the head of typhoid fever and measles; but, on the other hand, the death rate from whooping-cough was nearly doubled. On examining the list of diseases arranged in order of fatality,† it will be observed that three zymotic diseases occupy a prominent position, viz., diarrhœa, scarlatina, and typhoid fever, which are, respectively, usually the second, eighth, and ninth most fatal of all diseases in Victoria; but, in 1884, the first-named disease fell to the seventh and the next to the fiftieth place, whilst the last was the only one which maintained its usual position. Five deaths also occurred from small-pox, as against only 2 during the 10 years 1871–80. Of other zymotic diseases, the most important are metria, which caused in 1884 nearly 8 deaths to every 100,000 living; dietic diseases, consisting chiefly of want of breast-milk and alcoholism, nearly 23 deaths; parasitic diseases, such as thrush and hydatids, 9 deaths; and venereal diseases, chiefly amongst young children, and probably

Zymotic diseases.

* There is some difficulty in separating these diseases, many deaths being set down in the registers as due to "diphtheritic croup."

† See table following 600 *ante*.

congenital, 5 deaths to every 100,000 living. The death rate from metria was much above, that from dietic diseases much below, the average; whilst that from venereal diseases was somewhat above, that from parasitic diseases slightly below, the average.

Zymotic diseases in Australasian colonies. 604. The following is a statement of the number of deaths from zymotic diseases and of the proportion of such deaths to the total mortality and to the population over a series of years in all the Australasian colonies except Western Australia, respecting which no information is at hand. The colonies are placed in order according to the death rate from zymotic diseases prevailing in each:—

ORDER OF COLONIES IN REFERENCE TO MORTALITY FROM
ZYMOTIC DISEASES, 1873-82.

Colony.	Deaths from Zymotic Diseases, 1873-82.		
	Total Number.	Percentage of Total Deaths.	Annual Proportion per 10,000 Persons Living.
1. Queensland	10,245	30·11	52·7
2. Victoria	34,182	26·75	41·7
3. South Australia	9,171	25·11	38·6
4. New South Wales	23,871	22·73	35·8
5. Tasmania	3,416	19·07	31·2
6. New Zealand	12,600	25·20	30·6

Period unfavorable to Victoria.

605. It should be mentioned that the period named in the table can hardly be considered an average one, as it embraces the years from 1874 to 1876, in which epidemics of measles and scarlatina prevailed, which increased the death rate, it is true, more or less in all the colonies, but pressed with especial weight upon Victoria. In the five years ended with 1881 the mortality from zymotic diseases in Victoria was at the rate of 35·35 per 10,000, or slightly below the ten years' average in New South Wales, and in the last two years it was at the rate of about 30 per 10,000, or below that in any of the other colonies.

Zymotic diseases affecting children.

606. The seven zymotic diseases which chiefly affect children are measles, scarlatina, diphtheria, croup, whooping-cough, dysentery, and diarrhoea. The following table shows the number of deaths from such diseases which occurred during the twenty-one years ended with 1884, the annual means of the decade 1864-1873 and of the decade 1874-1883 being also given:—

DEATHS FROM ZYMOTIC DISEASES CHIEFLY AFFECTING CHILDREN,
1864 TO 1884.

Year.	Number of Deaths from—							Total.
	Measles.	Scarlatina.	Diphtheria.	Croup.	Whooping-cough.	Dysentery.	Diarrhoea.	
1864 ...	7	278	451	160	25	243	528	1,692
1865 ...	11	215	391	171	304	402	864	2,358
1866 ...	427	462	331	132	365	525	1,027	3,269
1867 ...	630	621	334	115	205	430	986	3,321
1868 ...	24	460	451	194	243	220	640	2,232
1869 ...	24	224	493	162	100	306	858	2,167
1870 ...	3	24	418	99	50	244	706	1,544
1871 ...	4	27	255	90	318	316	626	1,636
1872 ...	7	135	320	121	227	424	747	1,981
1873 ...	1	188	420	142	299	357	629	2,036
Annual mean } 1864-1873	113·8	263·4	386·4	138·6	213·6	346·7	761·1	2,223·6
1874 ...	256	120	375	159	151	325	846	2,232
1875 ...	1,541	985	239	135	58	509	1,002	4,469
1876 ...	5	2,240	201	173	13	202	675	3,509
1877 ...	6	183	359	315	245	254	963	2,325
1878 ...	5	136	336	331	291	197	877	2,173
1879 ...	3	61	337	275	193	140	698	1,707
1880 ...	252	26	198	156	179	122	604	1,537
1881 ...	62	86	114	125	167	115	671	1,340
1882 ...	15	89	122	142	109	182	968	1,627
1883 ...	7	59	131	167	48	139	885	1,436
Annual mean } 1874-1883	215·2	398·5	241·2	197·8	145·4	218·5	818·9	2,235·5
1884 ...	233	34	162	181	209	78	643	1,540

607. Notwithstanding the increase of population, the mortality in 1884 from the seven diseases named in the table was considerable below the average ; it was about equal to that in 1870 and 1880, higher than in 1881 and 1883, but much lower than in any other year. Diphtheria and croup caused a larger, measles and whooping-cough a much larger, but dysentery and diarrhoea a much smaller, mortality in 1884 than in 1883. Moreover, deaths from the last-named complaint were fewer in 1884 than in any previous year. The epidemic of measles which appeared during the year nearly corresponded in point of fatality with the previous outbreak in 1880 ; but was not nearly so fatal as the measles epidemics of 1866-7 and 1874-5.

Children's zymotic diseases, 1884.

608. Deaths from typhoid fever in 1884 numbered 456, or 205 less than in 1883, when, however, the number of deaths from this disease was

Typhoid fever.

the highest on record. In proportion to population, the mortality from typhoid fever in 1884 was much below the average. A steady increase in the death rate from that complaint had taken place between 1880 and 1883, in which latter year it was, with one exception, the highest recorded during a period of 19 years. During that period the death rate from typhoid fever has fluctuated considerably, but, nevertheless, there were two well-marked maximum periods, viz., 1866-7 and 1883, when the rates rose to over 7 per 10,000 persons living. The minimum periods are not so well marked; but in seven of the years deaths from typhoid were, as in 1884, below 5 per 10,000, and in three of those years, viz., 1871, 1873, and 1880, they were below 4 per 10,000. The following table shows the number of deaths from typhoid fever; and their proportion to the population, during each of the past nineteen years:—

DEATHS FROM TYPHOID FEVER, 1866 TO 1884.

Year.	Deaths from Typhoid Fever.		Year.	Deaths from Typhoid Fever.	
	Total Number.	Number per 10,000 Persons Living.		Total Number.	Number per 10,000 Persons Living.
1866 ...	528	8.39	1877 ...	532	6.58
1867 ...	455	7.06	1878 ...	532	6.48
1868 ...	295	4.45	1879 ...	438	5.25
1869 ...	360	5.24	1880 ...	297	3.49
1870 ...	416	5.83	1881 ...	351	4.04
1871 ...	269	3.65	1882 ...	472	5.30
1872 ...	323	4.29	1883 ...	661	7.21
1873 ...	282	3.68	1884 ...	456	4.82
1874 ...	470	6.04			
1875 ...	455	5.78			
1876 ...	375	4.71	Mean ...	419	5.35

Typhoid fever in England and Wales.

609. In England and Wales the mortality from typhoid fever has been considerably reduced of late years. During the ten years ended with 1880 the mean death rate therefrom was 4.30 per 10,000 persons living, which is even lower than in Victoria. In the years 1881 and 1882 it fell to 2.56 and 2.67 respectively per ten thousand,* or lower than it has ever been in this colony.

Typhoid fever in Australasian colonies.

610. The following table shows the mortality from typhoid fever in all the Australasian colonies except Western Australia during the eleven years ended with 1883, or during as many of those years as the information is available for:—

* The English figures quoted are those of enteric, or typhoid, and simple continued fever, which probably correspond with fevers tabulated as typhoid in Victoria. These fevers in England were not separated from typhus until 1869, the latter being a disease which, it is said, does not exist in Victoria.

DEATHS FROM TYPHOID FEVER IN AUSTRALASIAN COLONIES,
1873 TO 1883.

Year.	Number of Deaths from Typhoid Fever.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons. Living.	Total.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	282	3.68	...	...	67	4.78
1874 ...	470	6.05	...	...	78	5.03
1875 ...	455	5.78	298	5.00	158	9.16
1876 ...	375	4.71	401	6.49	72	3.91
1877 ...	532	6.58	375	5.81	105	5.38
1878 ...	532	6.48	441	6.50	197	9.53
1879 ...	438	5.25	265	3.71	132	6.16
1880 ...	297	3.49	240	3.33	54	2.43
1881 ...	351	4.04	266	3.49	85	3.85
1882 ...	472	5.30	450	5.63	166	6.99
1883 ...	661	7.21	397	4.70	255	9.52
Total...	4,865	5.34	3,133	4.92	1,369	6.18
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	68	3.48	24	2.32	127	4.41
1874 ...	97	4.82	44	4.22	161	5.05
1875 ...	94	4.53	50	4.81	340	9.47
1876 ...	92	4.22	26	2.49	195	5.03
1877 ...	84	3.63	41	3.86	133	3.26
1878 ...	106	4.37	50	4.61	131	3.11
1879 ...	101	3.97	38	3.42	208	4.64
1880 ...	63	2.39	29	2.55	177	3.73
1881 ...	85	2.95	33	2.81	137	2.78
1882 ...	146	5.03	36	2.98	128	2.51
1883 ...	135	4.51	64	5.15	182	3.44
Total ...	1,071	3.98	435	3.57	1,919	4.14

611. In all the colonies except New South Wales and New Zealand the death rate in 1883 from typhoid fever was much above the average; in Victoria and Tasmania, indeed, the rate was much higher than in any previous year named, whilst in Queensland it was equalled in one but exceeded in no previous year. Usually, it appears to be more fatal in Queensland, Victoria, and New South Wales than it is in the other three colonies; but in 1883 it was more fatal in Tasmania than in the last-named.

Deaths from typhoid fever in the colonies, 1883.

612. Hydatid disease, which is said to be communicated to man by reason of the ova of the tape worm in dogs being taken into the stomach, generally in water, and to prove fatal to 25 per cent. of the human victims it attacks, during the last twelve years has caused 546 deaths, or an average of 45.5 a year. Per 100,000 of the population, deaths from that disease ranged from 3.79 in 1873 to 7.19 in 1879, the average for the first six years being 4.56, for the second six years 6.19,

Hydatids.

and for the whole period 5·43. The following are the figures for the twelve years :—

DEATHS FROM HYDATIDS, 1873 TO 1884.

Year.	Deaths from Hydatid Disease.		Year.	Deaths from Hydatid Disease.	
	Total Number.	Number per 100,000 Living.		Total Number	Number per 100,000 Living.
1873 ...	29	3·79	1880 ...	48	5·64
1874 ...	41	5·27	1881 ...	48	5·50
1875 ...	47	5·97	1882 ...	58	6·51
1876 ...	36	4·52	1883 ...	56	6·10
1877 ...	37	4·57	1884 ...	59	6·24
1878 ...	27	3·29			
1879 ...	60	7·19	Mean ...	45·5	5·43

Hydatids in England.

613. Hydatid disease is much more fatal in Victoria than in England and Wales, where there were only 51 deaths from it in 1881, and 59 in 1882, to a population exceeding 26 millions, the proportion being 1 death from hydatids per 500,000 there, as against 1 to every 18,000 here.

Board of Health circular respecting hydatids.

614. In consequence of the prevalence of this disease in Victoria, the Central Board of Health have quite recently issued the following circular :—

“The question of impure water supplies has been latterly, on more than one occasion, carefully considered by this Board, and it is believed that a large quantity of water in daily use is unfit for human consumption unless precautions are taken. It is known that hydatid disease is on the increase in Victoria, and that many valuable lives are annually lost from want of a little knowledge and care. In *Quain's Dictionary of Medicine* it is stated that in Iceland, which is more infected with hydatid disease than any other country in the world, twenty-eight per cent. of the dogs are affected by it, and of the human subject one-sixth of the annual deaths are from hydatids. It is further stated that probably Victoria is already the second mostinfected territory. The Central Board desires to point out that in drinking open natural waters or eating vegetables to which dogs have access, all persons—but especially children—run a great risk of incurring hydatid disease, with all its consequent dangers. The Board strongly recommends that all such water be first thoroughly boiled; and persons living in the country, or travellers, should avoid drinking from waterholes or swampy water of any kind without such precaution, and in all cases the water supply for domestic use should be guarded against the invasion of dogs. Dogs should not be allowed to swim in reservoirs or, where possible to prevent it, to drink from the same supply as man, sheep, cattle, or pigs. It is highly important to remember that the purest-looking water may contain numerous hydatid germs; hence the importance of boiling the water where there is any risk. It is desirable to bury or throw boiling water over the exposed faeces of dogs, and chained dogs should have their kennels, and the ground for some distance round, purified frequently with boiling water. Dogs should never be fed with, or allowed the opportunity of eating, the offal of slaughterhouses, nor should pigs be kept there. The laws against unregistered dogs should be strictly enforced. It should be known that hydatid disease can be communicated to the human subject by impure salads or vegetables (uncooked), and care should be taken to wash and thoroughly cleanse everything of the kind before it is eaten. Water-cress from drains should never be eaten. Fluke in sheep is another source of danger, and such mutton should be carefully avoided. Further, it should be known that there is risk of contracting the disease in allowing dogs to lick the hands or faces of children or adults, and in permitting them to lick plates and dishes. In all this, as in many other cases, ‘cleanliness is one of the most important preventatives against infection.’”

615. In 1884, about one-sixth of the total deaths were set down to constitutional diseases, which caused 237 deaths to every 100,000 persons living, or 12 more than in 1883, and 21 above the average. Of the 237 deaths referred to, 142 resulted from phthisis, or pulmonary consumption, which in Victoria is the most fatal of all diseases*; 47 were set down to cancer, which in point of fatality stood tenth on the list for 1884*; 14 to hydrocephalus, or water on the brain; and 7 to dropsy. The rates from cancer and phthisis were much above, but those from dropsy and hydrocephalus somewhat below, the average.

Constitutional diseases.

616. Phthisis, or pulmonary consumption, caused 1,359 deaths in 1884, or 147 more than in 1883, and 85 more than in 1882, in which year the highest number previously recorded took place. Except during the prevalence of epidemics, phthisis is the occasion of more deaths than any other disease; in 1884, atrophy and debility stood next to phthisis on the list of causes of death,* but these complaints caused less than two-thirds of the number of deaths set down to the latter. It should also be borne in mind, as showing its baneful effects as compared with those of the other diseases named, that the deaths ascribed to atrophy and debility are for the most part those of infants and young children, whilst the majority of the victims of phthisis are at the adult period of life. The following table shows the number of deaths from phthisis and their proportions to the total population in each of the last twenty-four years:—

Phthisis.

DEATHS FROM PHTHISIS IN VICTORIA, 1861 TO 1884.

Year.	Deaths from Phthisis.		Year.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.†		Total Number.	Number per 10,000 Persons Living.†
1861 ...	753	13·94	1875 ...	1,027	13·04
1862 ...	707	12·90	1876 ...	1,010	12·68
1863 ...	717	12·74	1877 ...	1,088	13·46
1864 ...	686	11·70	1878 ...	1,124	13·68
1865 ...	741	12·12	1879 ...	1,058	12·69
1866 ...	782	12·43	1880 ...	1,175	13·82
1867 ...	793	12·31	1881 ...	1,199	13·80
1868 ...	746	11·25	1882 ...	1,274	14·31
1869 ...	893	12·99	1883 ...	1,212	13·21
1870 ...	888	12·45	1884 ...	1,359	14·36
1871 ...	841	11·41	Total in } 24 years }	22,905	12·91
1872 ...	876	11·63			
1873 ...	945	12·34			
1874 ...	1,011	13·00			

NOTE.—Deaths registered as occurring from hæmoptysis are included in this table.

* See table following paragraph 600 ante.

† For figures of mean population used in making these calculations, see table "Breadstuffs Available for Consumption" in Part "Production" post.

Death rate
from
phthisis.

617. By the figures in the table it appears that the death rate from phthisis fell with tolerable steadiness from 1861 to 1871, but since that period there has, on the whole, been a gradual increase. During the whole period of twenty-four years the deaths from this complaint were in the proportion of nearly 13 to every 10,000 persons living; during the first eleven of those years that proportion was $12\frac{1}{2}$ (12·38), and in the last thirteen years it was rather more than 13 (13·20). In 1884 the rate was higher than in any previous year.

Deaths of
males and
females
from
phthisis.

618. Phthisis in Victoria generally affects males more heavily than females. In 1884, 795 of the former, and 564 of the latter died of that complaint, the males being in the proportion of 15·85, but the females of only 12·69, per 10,000 of their respective sexes living.

Ages at
death from
phthisis.

619. The following table gives the number of deaths from phthisis at each age in 1884; also the proportion which such deaths bore to the total deaths from all causes in 1884 and in the ten years ended with 1880:—

DEATHS FROM PHTHISIS, 1884.—AGES AT DEATH.

Ages.	Number who Died from Phthisis, 1884.			Percentage of Deaths from Phthisis to those from all Causes.	
	Males.	Females.	Total.	1884.	Ten Years: 1871-80.
Under 5 years ...	14	11	25	·51	·51
5 to 10 „ ...	4	8	12	2·67	1·40
10 „ 15 „ ...	8	16	24	9·68	5·15
15 „ 20 „ ...	43	61	104	24·94	21·22
20 „ 25 „ ...	104	102	206	33·66	32·22
25 „ 35 „ ...	187	153	340	34·87	29·18
35 „ 45 „ ...	146	101	247	25·13	20·27
45 „ 55 „ ...	149	75	224	14·94	13·69
55 „ 65 „ ...	105	30	135	9·40	8·30
65 „ 75 „ ...	30	6	36	3·08	2·97
75 years and upwards...	5	1	6	·79	·83
Total ...	795	564	1,359	10·06	8·29

Phthisis
most fatal
to adults.

620. From a comparison of the figures in the last two columns, it will be observed that in proportion to the total deaths the mortality from phthisis in 1884, at all periods of life except infancy and extreme old age, was much above the average. In the year under review, fully one-third of the deaths of persons between the ages of 20 and 35, about one-fourth of those between 15 and 20 and between 35 and 45, and nearly a tenth of those between 10 and 15 and between 55 and 65, were caused by phthisis.

Phthisis in
Melbourne
and
country.

621. Of the 1,359 deaths from phthisis in 1884, 789 occurred in Melbourne and suburbs (Greater Melbourne) and 570 in other parts of the colony. In proportion to population, the deaths from phthisis have

always been much more numerous in the metropolis than in the remainder of the colony, as will be seen by the following figures, which are the results for twenty-four years:—

DEATHS FROM PHTHISIS PER 10,000 PERSONS LIVING IN AND OUTSIDE GREATER MELBOURNE, 1861 TO 1884.

Year.	Greater Melbourne.	Extra-Metropolitan Districts.	Year.	Greater Melbourne.	Extra-Metropolitan Districts.
1861 ...	23·44	10·63	1874 ...	22·04	8·94
1862 ...	24·64	8·71	1875 ...	21·46	9·25
1863 ...	23·71	8·79	1876 ...	22·46	8·28
1864 ...	20·08	8·70	1877 ...	22·74	9·29
1865 ...	22·11	8·57	1878 ...	22·62	9·63
1866 ...	20·42	9·53	1879 ...	21·77	8·45
1867 ...	21·56	8·87	1880 ...	23·95	8·92
1868 ...	20·83	7·63	1881 ...	22·71	9·45
1869 ...	23·87	8·83	1882* ...	23·09	10·03
1870 ...	22·49	8·56	1883 ...	22·27	8·71
1871 ...	22·08	7·20	1884 ...	24·45	9·14
1872 ...	18·69	8·62			
1873 ...	20·51	8·77	Means	22·25	8·89

622. In England and Wales, in the twenty-four years ended with 1882, the death rate from phthisis, per 10,000 persons, ranged from 26·02 in 1866 to 18·25 in 1881, the mean of the whole period being 22·91.† The average rate is much higher than that of Victoria, but appears to be only slightly higher than that of Greater Melbourne. It may be remarked that there is no doubt the death rate from phthisis in the latter, and to a certain extent in the whole colony, has for years past been swelled by the presence of persons who started from Europe whilst suffering from the disease in an advanced stage having been induced to take the voyage under the hope that benefit might be derived from the Australian climate, but have landed in Melbourne only to die there.

Death rate from phthisis in England.

623. Of the Chinese who died in Victoria in 1884, 23, or 12 per cent., fell victims to phthisis; this may be considered a low proportion, for it must be remembered that the Chinese in Victoria, with the

Phthisis among Chinese.

* It will be observed that in this year the death rate from phthisis both in Greater Melbourne and in the Extra-Metropolitan Districts was somewhat lower than in 1861, which may appear inconsistent with the fact that, as shown in the table following paragraph 616 *ante*, the whole death rate from phthisis in 1882 was above that in 1861. The facts, however, are quite compatible. It may sometimes happen that whilst two fractions are less respectively than two other fractions, the ratio of the sum of the numerators to the sum of the denominators of the first pair may nevertheless be greater than the ratio of the like terms of the second pair. An instance of this is cited by Mr. T. B. Sprague, Vice-President of the Institute of Actuaries, London, in an article entitled "*Does Vaccination afford any protection against Small Pox?*" in which he points out that the figures, taken as a whole, show the rate of mortality among the vaccinated to be much less than that among the unvaccinated; but when the cases are divided into those under and over 2 years of age, it is found that in each such class the rate of mortality of the vaccinated is greater than that of the unvaccinated.—See *Journal of the Institute of Actuaries*, vol. xx., page 228 C. & E. Layton, London, 1878.

† See Forty-fifth Report of the Registrar-General of England, page lviii.

exception of a very small number of children and old people, are all at the ages at which attacks of phthisis are most common. In the previous year 17 per cent. of the deaths of Chinese were from phthisis.

Phthisis
among
Aborigines.

624. Three out of the 26 deaths of Aborigines in 1884 were set down to phthisis. Mr. Henry Jennings, Vice-Chairman of the Board for the Protection of the Aborigines, in his report dated 1st July, 1879,* says—"Lung disease" (with which he probably includes phthisis) "is the chief cause of the death of the Aborigines, who, when once affected, very seldom recover;" and Mr. Richard Bennet, in an article entitled *Some Account of Central Australia*,† says, with reference to the Australian Aborigines generally, "From my experience among the blacks, I believe nine-tenths of them die of consumption."

Phthisis in
Austral-
asian
colonies.

625. The rate of mortality from phthisis in Victoria would appear, by the calculations in the following table, to have been, over a series of years, slightly lower than in Queensland, but much higher than in any other of the Australasian colonies. It will be observed that the figures of the other colonies in the several years exhibit more variation than those of Victoria, also that Queensland is the only colony besides Victoria in which the rate in any of the years exceeded 13 per 10,000 ‡:—

DEATHS FROM PHTHISIS IN AUSTRALASIAN COLONIES,
1873 TO 1883.

Year.	Number of Deaths from Phthisis.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	945	12·34	...	...	145	10·35
1874 ...	1,011	13·00	...	...	163	10·51
1875 ...	1,027	13·04	614	10·31	228	13·22
1876 ...	1,010	12·68	616	9·96	260	14·12
1877 ...	1,088	13·46	597	9·24	225	11·53
1878 ...	1,124	13·68	652	9·62	263	12·72
1879 ...	1,058	12·69	746	10·45	281	13·12
1880 ...	1,175	13·82	803	11·13	301	13·56
1881 ...	1,199	13·80	874	11·45	292	13·21
1882 ...	1,274	14·31	927	11·60	404	17·00
1883 ...	1,212	13·21	948	11·24	471	17·58
Total...	12,123	13·29	6,777	10·60	3,033	13·68

* See Fifteenth Report of the Board, Parliamentary Paper No. 68, Session 1879.

† See *Victorian Review* for April 1880, page lxxv.

‡ It is pointed out by the Registrar-General of Queensland, in recent Annual Reports, that the death rate from phthisis in that colony is considerably swelled by the prevalence of the disease amongst the Polynesians, more than two-fifths of such deaths in 1882—for example—having been caused by phthisis. Excluding the Polynesians from the calculation, the death rate from phthisis in Queensland in 1882 was only 10·24 per 10,000.

DEATHS FROM PHTHISIS IN AUSTRALASIAN COLONIES, 1873 TO 1883—continued.

Year.	Number of Deaths from Phthisis.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	153	7·84	115	11·10	206	7·16
1874 ...	179	8·89	101	9·69	270	8·47
1875 ...	209	10·07	114	10·97	339	9·45
1876 ...	226	10·36	102	9·75	307	7·92
1877 ...	203	8·78	127	11·95	326	7·98
1878 ...	267	11·00	115	10·60	326	7·73
1879 ...	271	10·66	90	8·09	399	8·90
1880 ...	277	10·51	113	9·95	447	9·42
1881 ...	274	9·49	115	9·80	468	9·28
1882 ...	341	11·77	127	10·52	438	8·60
1883 ...	313	10·47	139	11·18	500	9·45
Total...	2,713	10·08	1,258	10·33	4,026	8·68

626. Next to phthisis, the most fatal of the constitutional diseases is cancer. This complaint caused 446 deaths in 1884, which was a larger number than in any previous year, except 1883. Cancer in a fatal form has been much increasing of late years; it stood tenth in the last three years, and eighth or ninth in the preceding three years, in the list of causes of death*—its usual place being the twelfth; and since 1861 the death rate from it has increased steadily from less than 2 to nearly 5 per 10,000 of the population. The following table shows the number of deaths from cancer, and the number per 10,000 persons living, in each of the last twenty-four years:—

DEATHS FROM CANCER, 1861 TO 1884.

Years.	Deaths from Cancer.			
	Total Number.			Number per 10,000 Persons Living.
	Males.	Females.	Total.	
1861 ...	52	50	102	1·89
1862 ...	30	50	80	1·46
1863 ...	58	45	103	1·83
1864 ...	55	72	127	2·17
1865 ...	81	70	151	2·47
1866 ...	52	64	116	1·84
1867 ...	63	57	120	1·87
1868 ...	95	88	183	2·76
1869 ...	85	99	184	2·68
1870 ...	109	105	214	3·00
1871 ...	100	93	193	2·62
1872 ...	130	96	226	3·00

* See table following paragraph 600 ante.

DEATHS FROM CANCER, 1861 TO 1884—*continued.*

Years.	Deaths from Cancer.			
	Total Number.			Number per 10,000 persons Living.
	Males.	Females.	Total.	
1873	122	128	250	3·27
1874	146	122	268	3·45
1875	168	140	308	3·91
1876	150	153	303	3·80
1877	169	160	329	4·07
1878	182	132	314	3·82
1879	205	178	383	4·59
1880	202	181	383	4·50
1881	172	179	351	4·04
1882	208	165	373	4·19
1883	234	216	450	4·90
1884	221	225	446	4·71
Total in 24 years...	3,089	2,868	5,957	3·36

Proportions
of the sexes
who died of
cancer.

627. Cancer is a complaint which generally affects females more than males. In the twenty-four years of which mention is made in the table, 93 of the former have died of it to every 100 of the latter, whereas the proportion of females to males at ages at which cancer is most prevalent (*i.e.* above 30 years of age) has over the whole period* been considerably below the proportion named. In 1884, even more females died of cancer than males, although, in the population, females over the age of 30 were in the proportion of only 75 to every 100 males.

Increase of
cancer in
England.

628. Cancer in a fatal form is increasing in England as well as in this colony, as is strikingly shown by Mr. Walter Whitehead, F.R.C.S.E., in an address recently delivered by him before the Manchester Medical Society.† In view of the following figures, Mr. Whitehead remarks that, “if the increase is to continue at the same rate, cancer will constitute, in a few years, the only disease the profession will have to contend with”:—

INCREASE OF CANCER IN ENGLAND AND WALES.

In 1849 Cancer caused 1 death in every 90 deaths.

1851	”	”	73	”
1870	”	”	52	”
1880	”	”	40	”
1882	”	”	36	”

629. In Victoria, in 1884, 1 death in every 30 was from cancer, or a much higher ratio than that shown for England and Wales at the latest date. Mr. Whitehead also gives figures to show that, although in

* At the age referred to, females in the population were in the proportion of 42 at the census of 1861 of 59 at the census of 1871, and of 74 at the census of 1881, to every 100 males.

† See *Insurance Post*, April, 1885, page 528. Stacey, Whitefriars-street, London.

Increase
of cancer
among
males.

England twice as many females die from cancer as males, the number of deaths from it among men is increasing in a much larger proportion than among women.

630. To dropsy, which is classed as a constitutional disease, 65 Deaths from dropsy. deaths were attributed in 1884, and 613 in the ten years 1871 to 1880. Dropsy being rather a symptom of a disease than a disease itself, it is to be regretted that some more exact definition of the cause of death was not given in these cases. The Registrar-General of England, under the head of "Inadequate certification of causes,"* makes the following remarks on dropsy as an assigned cause of death:—

"Among the assigned causes of death, one of the most unsatisfactory, not only because of its insufficiency, but because of the great frequency with which it occurs, is dropsy. This, of course, is a symptom of a great number of diverse diseases, renal, pulmonary, hepatic, and cardiac. Yet in no less than 1,882 cases during the year dropsy was the assigned cause, without further particulars as to its origin. These 1,882 certificates were scarcely more than so much waste paper, so far as classification of deaths by causes is concerned. Seeing that the main object of the expenditure of labour and money in the tabulation of causes of death is the advance of medical knowledge, surely it is not too much to expect that medical practitioners shall not fill in their certificates in so careless a manner as to render any accurate tabulation an impossibility."

631. Local diseases, Class III., or diseases of special organs or Local diseases. systems, usually cause a much higher mortality than any other class of diseases; thus, in 1884, 5,890 deaths, or 44 per cent. of the deaths from all causes, were ascribed to them, as against an average of 38 per cent. in the ten years 1871 to 1880. The deaths from diseases placed in this class in 1884 were in the proportion to every 100,000 of the population of 623, or 33 more than in 1883, or 40 above the ten years' average. About a fourth of these diseases were due to affections of the brain and nerves; nearly a sixth to diseases of the circulatory system, including heart disease; nearly a third to lung and throat diseases—bronchitis, pneumonia, pleurisy, &c.; about a fifth to diseases of the digestive organs; 6 per cent. to diseases of the urinary organs; and the remainder to diseases of the generative, locomotive, and integumentary systems. In the year under review the death rate from diseases of the circulatory, respiratory, digestive, and urinary systems were above, and those of the nervous, generative, locomotive, and integumentary systems, were below, the decennial average.

632. The high mortality from diseases of the respiratory system in Diseases of respiratory system. 1884 deserves special notice. The diseases in this group cause, on the average, nearly half as many deaths again as phthisis (which is not included amongst "lung diseases," being classed as a "constitutional" disease), and about one-ninth of the total mortality. The victims are,

* See his Forty-fourth Report, page **xxi**.

for the most part, young children and old people, the majority dying in the winter quarter (July to September). In the year under review 1,886 deaths from these causes took place, being equal to about one-seventh of the total mortality; of these, pneumonia caused 759, bronchitis 654, and congestion of the lungs 215. Of those who died from these complaints, 788 were under 5 years—more than half of these being under 1 year—and 665 were over 50 years of age. If deaths from phthisis be added to these, it will be found that altogether 3,245 deaths in 1884 were from diseases particularly affecting the organs of respiration, which is equal to one-fourth of the total mortality, as compared with an average proportion of not quite one-fifth.

Develop-
mental
diseases.

633. Developmental diseases, Class IV., caused to every 100,000 of the population 203 deaths in 1884, of which 49 were due to diseases peculiarly affecting infants, such as premature birth, malformations, teething, &c.; 15 to affections of women—principally accidents of child-birth; 49 to old age; and 90 to diseases of nutrition, such as atrophy and debility, of which the great majority were of infants or young children. The rate of mortality from the whole class in 1884—viz., 203 per 100,000—was only 1 less than in 1883, and only 4 above the average; but so small a deviation from the average was not shown in all the subdivisions; for the rate from diseases of infants was as much as one-fifth below, that from diseases of women was slightly below, that from old age was as much as 50 per cent. above, and that from atrophy and debility was slightly above, the average. The increased death rate from old age is accounted for by the circumstance that the proportion of old people in the population has increased since 1871-80 (the period over which the average extends) by 43 per cent., whilst the average age of such persons has advanced also. In like manner, much of the decrease under Order 1 is more apparent than real; since the proportion of infants under 1 year to the population—as indicated by the birth rate—has fallen off by one-ninth since 1871-80. In view of the same circumstance, the mortality from atrophy and debility has really increased in a much greater proportion than that indicated by the death rate already referred to; in 1884, moreover, these affections caused more deaths than any other disease, except phthisis, their usual position in order of fatality being fourth.* The deaths of infants born prematurely numbered 320 in 1884—which number gives a proportion of 10 per cent. of the total deaths under 1 year, or of $1\frac{1}{9}$ per cent. of the total births recorded, as compared with an average of 8 per cent. of the deaths under 1 year, and of 1 per cent. of the births recorded, during the decade 1871-80.

* See table following paragraph 600 *ante*.

634. The death rate from a given complaint is usually ascertained by comparing the number of deaths from it with the number of persons living, but the death rate of women in childbed is better realized by comparing the number of deaths of parturient women with the total number of births. Such deaths are classified in two ways. If the death is supposed to occur merely from the consequences of child-bearing without specific disease, it is set down as of Childbirth, Class IV., Order 2; but, if it should arise from puerperal fever, it is placed under the head of Metria, Class I., Order 1. In 1884 the proportion of deaths from child-bearing to the number of children born was much above the average, being higher than in any previous year except 1874, 1875, 1878, and 1881:—

DEATHS OF WOMEN IN CHILDBIRTH, 1864 TO 1884.

Year.	Number of Mothers who died of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Childbirth.	Metria.	Total.	
1864	100	21	121	47·12
1865	99	24	123	47·46
1866	112	26	138	55·18
1867	117	20	137	53·51
1868	110	23	133	48·82
1869	105	18	123	47·23
1870	115	9	124	45·67
1871	90	12	102	37·25
1872	123	16	139	50·80
1873	127	44	171	60·85
1874	142	109	251	93·66
1875	154	83	237	88·70
1876	117	48	165	61·64
1877	131	42	173	66·51
1878	149	49	198	74·49
1879	123	38	161	59·99
1880	111	20	131	50·09
1881	155	78	233	85·84
1882	117	59	176	65·80
1883	115	43	158	57·37
1884	131	72	203	70·36
Total in twenty-one years	2,543	854	3,397	60·48

635. In 1884, the death rate of parturient women shows a sudden increase concurrently with the prevalence of an epidemic of measles. It is a remarkable fact that at or about the four periods during the last twenty-one years at which epidemics of measles and scarlatina have prevailed in Victoria,* viz., 1866-7, 1874-5, 1881-2, and 1884, the mortality of child-bearing women largely increased. Whether this is only a coincidence, or whether there is any connexion between the two

* See table following paragraph 600 *ante*.

circumstances, is a matter which merits the consideration of the medical faculty. It should be mentioned that the visitation in 1881-2 differed somewhat from the others, as the deaths of child-bearing women did not increase in numbers concurrently with the epidemic, but in the year following that in which it was most fatal.

Deaths in
childbed in
Victoria and
United
Kingdom.

636. The proportion of women dying in childbed during the whole period of twenty-one years was 1 to 165 births, but in 1884 the proportion was as high as 1 to every 142 births. In 1883, the proportion was 1 to every 174 births; in 1882, 1 to every 152 births; in 1881, 1 to every 116 births; and in 1880, 1 to every 200 births. All these proportions, except that for 1880, are much higher than those in England and Wales, where, in the thirty-six years ended with 1882, 204 births occurred to each death of a mother.* In Scotland, 1 woman died in childbirth to every 207 births during 1873, and to every 149 births in 1874; and in Ireland, during the ten years, 1869-78, 1 woman died to every 151 births.

Deaths of
women in
Lying-in
Hospital.

637. In the Melbourne Lying-in Hospital, 583† women were confined, and 542 infants were born alive, during the year ended 30th June, 1884. Nineteen deaths of mothers occurred during or shortly after parturition; or 1 death of a mother to every 31 deliveries, or to every 28 births; this is an excessive rate of mortality, and finds but one parallel during the last eleven years, viz., in 1881; the proportion in that year and in the year under review being about three times as high as in 1882-3, and more than twice as high as in 1874, when the mortality of child-bearing women in the colony generally was at its maximum. In 1882-3, 1 death of a mother took place to every 86 deliveries or 77 births; in 1882 (first six months), 1 to 60 deliveries or 56 births; in 1881, 1 to 29 deliveries or 27 births; in 1880, 1 to 98 deliveries or 89 births; in 1879, 1 to 71 deliveries or 67 births; in 1878, 1 to 92 deliveries or 86 births; in 1877, 1 to 65 deliveries or 61 births; in 1876, 1 to 68 deliveries or 65 births; in 1875, 1 to 67 deliveries or 62 births; and in 1874, 1 to 64 deliveries or 60 births. These proportions are, on the average, about $2\frac{1}{2}$ times as high as those for the whole colony; but it should be mentioned that, all over the world, maternity hospitals are subject to receive a worse class of cases than the average of those dealt with outside, women not unfrequently being brought in such a state as to render their recovery from the first

* There is reason to believe, however, that the mortality from childbirth and metria in England is much understated, as the sending out of letters of inquiry in 1882—an exceptional proceeding—respecting certain ill-defined causes of death had the effect of increasing the recorded mortality from childbirth and metria 10 per cent. If this correction be applied to the average above stated, the proportion would be one death of a mother to as few as 185 births.—See 45th Annual Report of the Registrar-General of England, page xvii.

† Including 83 cases occurring outside the hospital at houses provided by the committee, amongst whom 3 deaths occurred.

almost hopeless ; therefore, in all such institutions, the death rate of the inmates is higher than that which prevails amongst child-bearing women in the general population.

638. From the last annual report of the Lying-in Hospital,* it appears that towards the close of the financial year 1883-4, the committee, being alarmed at the high rate of mortality which about that time prevailed in the institution, took steps to have the patients boarded out, and the wards thoroughly cleansed and disinfected—the walls being painted with an antiseptic composition, and the lighting and ventilation improved. The committee state that the overcrowding of the institution, in order to meet the increasing demands made upon it, has been the cause of its unhealthiness ; but that, in accordance with the requirements of the Central Board of Health, it is now incumbent upon them to lessen the accommodation by reducing the number of beds in each ward. Of the 19 women who died in 1883-4, after being confined in the hospital, or outside in houses under the supervision of its officers, 10† are stated to have fallen victims to puerperal peritonitis, 1 to puerperal septicæmia from uterine phlebitis, 1 to puerperal convulsions, 1 to puerperal eclampsia, and 2 to pneumonia, besides 4 others. It is further stated that 2 of these women were admitted in a moribund, and 1 in an unconscious, state ; 1 was found in the street by the police immediately after confinement, at an early hour on a bitterly cold morning ; whilst others were admitted in a low and debilitated condition. Amongst the latter 10 were single girls (one a mere child of 15), who had been subjected more or less to exposure and privation for months before admission.

Causes of death in Lying-in Hospital.

639. Deaths of lying-in women appear to be more common in Victoria than in any other Australasian colony. It should, however, be mentioned that the fact of a woman dying in childbed is not always at once discoverable from the death registers. Whether from a desire to conceal the fact of their losing patients in this manner, or from inadvertence, medical men frequently enter the cause of death as debility, exhaustion, blood-poisoning, pyæmia, septicæmia, phlebitis, embolism, peritonitis, hæmorrhage, &c., omitting to state that these circumstances were consequent upon child-bearing until specially asked whether such was the case. The causes of death of females at child-bearing ages should be carefully scrutinized, and the entry should be referred back for inquiry in all cases where the death is stated to have occurred from any of the above causes. It is questionable whether in any of the other colonies the scrutiny is as close as it is in Victoria, and hence it is

Deaths in childbed in Australasian colonies.

* See 27th Annual Report for the year 1883-4.

† One of these was also suffering from syphilis, 1 from pleurisy, and 1 from enteritis.

probable that the full extent of the mortality in childbirth occurring is not known. The inaccuracy with which such deaths are often described is beginning to excite attention in England, where the Registrar-General in 1881 and 1882 caused special letters of inquiry to be sent out respecting doubtful deaths of women at child-bearing ages, with the result that 348 deaths in the former and 428 in the latter year were added to those assigned to puerperal fever and the other incidents of childbirth.* Such a practice had been followed for some years in Victoria, and it is much to be wished it should be adopted by the other colonies of this group. The following table contains a statement of the deaths recorded as having occurred from childbirth and metria in all the Australasian colonies except Western Australia during the eleven years ended with 1883, and the proportion of such deaths to every 10,000 children born alive in each colony :—

DEATHS FROM CHILDBIRTH AND METRIA IN AUSTRALASIAN
COLONIES, 1873 TO 1883.

Year.	Number of Deaths from Childbirth and Metria.					
	Total.	Per 10,000 Children Born Alive.	Total.	Per 10,000 Children Born Alive.	Total.	Per 10,000 Children Born Alive.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	171	60·85	...	...	23	40·21
1874 ...	251	93·66	...	...	33	51·70
1875 ...	237	88·70	149	66·14	37	55·17
1876 ...	165	61·64	186	79·84	43	62·29
1877 ...	173	66·51	113	47·38	53	73·93
1878 ...	198	74·49	103	40·67	46	62·19
1879 ...	161	59·99	90	33·42	38	48·28
1880 ...	131	50·09	127	45·10	42	51·24
1881 ...	233	85·84	117	40·35	70	85·15
1882 ...	176	65·80	118	39·73	49	57·53
1883 ...	158	57·37	114	36·44	42	42·47
Sums & Means }	2,054	69·53	1,117	46·54	476	57·37
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	22	30·96	26	85·30	52	46·34
1874 ...	38	49·38	20	64·58	74	57·61
1875 ...	54	72·89	32	103·06	93	64·41
1876 ...	49	59·58	20	63·51	74	45·77
1877 ...	45	52·08	25	77·86	74	43·90
1878 ...	41	44·17	16	45·69	85	47·83
1879 ...	50	50·49	11	30·86	81	44·83
1880 ...	39	38·00	18	48·14	76	39·29
1881 ...	62	57·90	14	35·73	92	49·11
1882 ...	70	64·55	14	34·63	101	53·14
1883 ...	49	43·86	19	44·61	95	49·47
Sums & Means }	519	51·26	215	55·65	897	48·66

* See 44th and 45th Annual Reports of the Registrar-General of England, pp. xxi and xvii respectively.

640. The above figures show that, in proportion to the children born alive, the number of deaths of child-bearing women in 1883 was much below the average in every one of the colonies except New Zealand, where it was slightly above it. Low death rate from childbirth in colonies, 1883.

641. The connexion between the prevalence of measles and scarlatina and of those circumstances which cause the deaths of women in childbed is exemplified in the returns of the neighbouring colonies as well as in those of Victoria; from 1874 to 1876 being about the period when these epidemics were at their height, concurrently with the greatest mortality occurring to child-bearing women. In one year of that period the rate in Victoria rose to nearly 1 death of a mother to every 100 children born alive, and in Tasmania to over 1 to every 100. Increase of deaths in childbed during epidemics in all the colonies.

642. In proportion to population, deaths under the head of atrophy and debility in 1884 were more numerous by 54 than in 1883, but fewer by 82 than in 1882. The mortality under this head is almost entirely confined to young children and infants—thus, of the 853 set down thereto in 1884, 759 were under 5 years, 673 were under 1 year, 287 were under 1 month, of age. In proportion to the numbers living at the ages just referred to, the mortality from this cause is considerably above the average. It is probable, however, that the causes of death amongst children are too often loosely given, and that sufficient pains are not taken to ascertain the primary disease. As a knowledge of the causes of death in childhood is a matter of some importance, it is to be desired that medical men should, where possible, define them more accurately. The following are the numbers of both sexes recorded as having died from atrophy and debility in each of the eighteen years ended with 1884:— Atrophy and debility.

DEATHS FROM ATROPHY AND DEBILITY, 1867 TO 1884.

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1867 ...	399	347	746	1876 ...	344	305	649
1868 ...	337	328	665	1877 ...	344	304	648
1869 ...	386	337	723	1878 ...	389	311	700
1870 ...	422	368	790	1879 ...	407	304	711
1871 ...	368	311	679	1880 ...	369	324	693
1872 ...	354	338	692	1881 ...	392	345	737
1873 ...	378	336	714	1882 ...	493	442	935
1874 ...	402	337	739	1883 ...	412	387	799
1875 ...	413	349	762	1884 ...	488	365	853
Annual mean 1867 to 1875	380.3	335.6	715.9	Annual mean 1877 to 1884	411.7	347.8	759.5

643. Notwithstanding the proportions of the sexes of persons at ages to be affected by atrophy and debility were about equal, it will be observed that in every one of the years more males died than females. Sex of those who died of atrophy, &c.

During the whole period, females died of these complaints in the proportion of 87 to every 100 males.

Violent
deaths.

644. Deaths from external causes, Class V., in proportion to population, were formerly twice as numerous in Victoria as in England and Wales; but in recent years, as the number of individuals engaged in mining operations has decreased, the rate in the former has fallen considerably. Over a series of twenty-seven years, the average annual number of violent deaths per 100,000 of the population was 136, but during the ten years 1871-80 it was only 108, in 1883 it fell to as low as 84. The last-named rate, however, is still higher by about a ninth than the rate prevailing in England and Wales, where it averages only 76.

Violent
deaths, 1884
and pre-
vious years.

645. The number of violent deaths recorded in Victoria during 1884 was 799, of which 685, or 86 per cent., were ascribed to accident; 25, or 3 per cent., to homicide; 86, or 11 per cent., to suicide; and 3 to execution. Deaths from accidents were more numerous formerly than those from any single disease, and more recently than those from any disease except phthisis and diarrhœa, but in 1884 they had fallen to the fifth place on the list.* Forty-five per cent. of the deaths from accidents in that year were due to fractures, 26 per cent. to drowning, and 12 per cent. to burns and scalds. Homicides were slightly above, but suicides were below, the average of the ten years ended with 1880; the latter numbered only 86, as against 103 in the previous year. The following table shows the number of deaths and the exact modes of death under the heads of accident and suicide, also the number of deaths from homicide and execution, during the year 1884 and the decade ended with 1880, the sexes of those who died being distinguished:—

VIOLENT DEATHS.

Causes of Death.	Year 1884.			Ten Years: 1871 to 1880.		
	Males.	Females.	Total.	Males.	Females.	Total.
Accidents:—						
Fractures and contusions	271	42	313	2,911	241	3,152
Gunshot wounds ...	7	...	7	} 226	36	262
Cuts, stabs, &c. ...	6	3	9			
Burns and scalds ...	32	54	86	371	514	885
Sunstroke ...	5	2	7	158	60	218
Lightning ...	...	1	1	22	3	25
Poison ...	9	6	15	112	66	178
Snake, insect—bite ...	3	...	3	24	13	37
Drowning ...	147	32	179	1,558	379	1,937
Suffocation ...	35	18	53	409	216	625
Others ...	7	5	12	97	31	128
Total ...	522	163	685	5,888	1,559	7,447

* See table following paragraph 600 ante.

VIOLENT DEATHS—*continued.*

Causes of Death.	Year 1884.			Ten Years: 1871 to 1880.		
	Males.	Females.	Total.	Males.	Females.	Total.
Homicide	11	14	25	123	67	190
Suicide:—						
Gunshot wounds	12	...	12	69	...	69
Cuts, stabs, &c.	10	3	13	164	21	185
Poison	10	4	14	144	44	188
Drowning	17	3	20	151	66	217
Hanging	21	1	22	233	23	256
Otherwise	5	...	5	31	5	36
Total	75	11	86	792	159	951
Execution	3	...	3	19	...	19
Grand Total	611	188	799	6,822	1,785	8,607

646. During the ten years ended with 1880, 69,916 males and 52,328 females died of specified causes; and it results from these figures and those in the foregoing table, that, of the males, 1 in every 10 died a violent death; 1 in every 12 died of an accident; 1 in every 568 was a victim to homicide; 1 in every 88 committed suicide; and 1 in every 3,680 was executed. Of the females, 1 in every 29 died a violent death; 1 in every 34 died of an accident; 1 in every 781 died by the hand of another; 1 in every 329 committed suicide; but, happily, not one was executed.

Violent deaths in proportion to total deaths.

647. Males are much more subject to violent deaths than females. Of those who so died in 1884, 611, or 76 per cent., belonged to the male, and 188, or 24 per cent., to the female, sex.

Violent deaths of males and females.

648. Omitting fractions, it may be roughly stated that, where 1 female dies a violent death in Victoria, 4 males die violent deaths; where 1 female dies of an accident, 4 males die of accidents; where 1 female is murdered, about 3 males are murdered; where 1 female commits suicide, 5 males do so. Only 1 woman has been executed in the colony since its first settlement; but in the 33½ years since Victoria has been an independent colony as many as 124 males were executed.

Violent deaths: proportion of males and females.

649. The only violent deaths which habitually affect females more than males are those resulting from burns and scalds. All other circumstances which occasion such deaths bear more hardly upon males than upon females.

Burns and scalds.

650. Eighty-six persons took their own lives in 1884, and 103 in the previous year. During the ten years ended with 1880 the mean annual number of deaths by suicide was 95.

Suicidal deaths.

Modes of committing suicide.

651. Hanging is the most common mode by which men commit suicide, cutting or stabbing usually the next, drowning and taking poison with almost equal frequency the next, shooting the next. Females most frequently take their lives by drowning, next so by taking poison, next by hanging or stabbing, but not once in the 170 cases named in the table by shooting.

Suicides of Chinese.

652. Suicide frequently occurs amongst the Chinese. Six men of this race committed that act in 1884—all by hanging. The total number of Chinese males in the colony is about 12,000; so that those who committed suicide during the year were in the proportion of about 1 in 2,000. In the general population the proportion averages only 1 in about 8,000.

Suicides in Australasian colonies.

653. According to the results in the following table, it would appear that, in proportion to population, suicide is more common in Victoria than in any other Australasian colony except Queensland. It should, however, be stated that the death records frequently do not upon the surface show that the death has been suicidal, and close examination, with sometimes further inquiry, is therefore necessary to determine that fact. It is hence likely that the full extent to which suicide prevails in some of the colonies is not ascertained. The following are the suicides and their proportion to every 100,000 of the population during the eleven years ended with 1883 recorded in all the Australasian colonies except Western Australia:—

DEATHS FROM SUICIDE IN AUSTRALASIAN COLONIES,
1873 TO 1883.

Year.	Number of Deaths from Suicide.					
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	97	12·7	41	7·5	22	15·7
1874 ...	97	12·5	64	11·2	10	6·4
1875 ...	91	11·6	55	9·2	23	13·3
1876 ...	100	12·6	61	9·9	24	13·0
1877 ...	92	11·4	66	10·2	27	13·8
1878 ...	87	10·6	48	7·1	29	14·0
1879 ...	108	13·0	62	8·6	40	18·7
1880 ...	118	13·9	68	9·4	22	9·9
1881 ...	102	11·7	83	10·9	21	9·5
1882 ...	83	9·3	55	6·9	40	16·8
1883 ...	103	11·2	54	6·4	37	13·8
Total ...	1,078	11·8	657	9·0	295	13·3

DEATHS FROM SUICIDE IN AUSTRALASIAN COLONIES, 1873 TO 1883—*continued.*

Year.	Number of Deaths from Suicide.					
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	10	5·1	6	5·8	20	7·0
1874 ...	22	10·9	6	5·8	20	6·3
1875 ...	24	11·5	6	5·8	29	8·1
1876 ...	15	6·9	6	5·7	42	10·8
1877 ...	17	7·3	10	9·4	32	7·8
1878 ...	18	7·4	8	7·4	37	8·8
1879 ...	18	7·1	5	4·5	42	9·4
1880 ...	25	9·5	8	7·0	38	8·0
1881 ...	34	11·8	6	5·1	42	8·5
1882 ...	18	6·3	3	2·5	53	10·4
1883 ...	31	10·4	5	4·0	55	10·4
Total ...	232	8·6	69	5·8	410	8·7

654. It will be observed that, according to the records, the suicides which take place annually in Victoria and Queensland are almost invariably above 1 per 10,000 persons living, but those which take place in the other colonies are generally below that proportion, which indeed was not once reached in Tasmania, only thrice in New Zealand and New South Wales, and only four times in South Australia, during the eleven years named in the table. The rate in Tasmania, moreover, appears to be much lower than in any of the other colonies.

Proportion of suicides in different colonies.

655. In England and Wales* during the sixteen years ended with 1880, suicidal deaths per 100,000 of the living population ranged from 6·2 in 1867 to 8 in 1879, the proportion over the whole period being 6·9. This is a lower proportion than that obtaining in any of the Australasian colonies except Tasmania.

Suicides in England and Wales.

656. Statistics of suicide in a number of countries have been collected with much care by Dr. Enrico Morselli, Professor of Psychological Medicine in the Royal University of Turin. Dr. Morselli arrives at the conclusion that suicide is increasing in almost every country; that "religion and morals have never reached the root of the calamity"; that the sole preventive, not only against suicide but against madness, would consist in "diminishing the struggle for life amongst men, and in developing in man the well ordering sentiments and ideas by which to

Suicides in Foreign countries.

* See Forty-third Report of the Registrar-General of England, page lxxvi.

reach a certain aim in life; in short, to give force and energy to the moral character." From his work on the subject, the following proportions have been abstracted* :—

DEATHS FROM SUICIDE IN FOREIGN COUNTRIES.

	Deaths from Suicide in each year per 100,000 Persons Living.		Deaths from Suicide in each year per 100,000 Persons Living.	
Saxony	31·1	Norway ...	...
Denmark	25·8	Belgium ...	...
Schleswig-Holstein	24·0	Hungary ...	...
Austria	21·2	Italy ...	...
France	15·0	Netherlands ...	...
Hanover	14·0	United States ...	...
Prussia	13·3	Russia ...	...
Bavaria	9·1	Spain ...	...
Sweden	8·1		

Suicides in
Austral-
asia and
Foreign
countries.

657. It will be observed that, in proportion to population, suicide is more rife in Saxony, Denmark, Schleswig-Holstein, Austria, France, Hanover, and Prussia than in Queensland, Victoria, or New South Wales, and in these countries, with the addition of Bavaria, than in South Australia and New Zealand; whilst Tasmania stands not only below these, but also below Sweden, Norway, and Belgium. The only countries quoted which stand below any of the Australasian colonies in point of frequency of suicide are Hungary, Italy, the Netherlands, the United States, Russia, and Spain.

Suicides in
certain
countries.

658. In addition to the above, figures for the following countries are given by Mr. Mulhall.† The observations extend over the years 1871 to 1877:—

DEATHS FROM SUICIDE IN CERTAIN COUNTRIES.

	Deaths from Suicide in each year per 100,000 Persons Living.		Deaths from Suicide in each year per 100,000 Persons Living.	
Switzerland	20·2	Scotland ...	...
Germany	14·3	Ireland ...	...
Sweden and Norway	8·1		

Causes
assigned for
increase of
suicide.

659. Mr. Mulhall thinks that the most notable causes of the increase of suicide are "the increase of railways and commerce, the great consumption of spirits and flesh meat, the spread of secular education and infidelity, the rapid growth of urban and decline of rural life, the higher ratio of insanity, the increase of wealth, the new system of divorce, and the keener struggle for existence in Europe, owing to the greater density of population."

* See *Suicide*, by Henry Morselli, M.D. Table IV., page 30. London: Kegan Paul & Co., 1881.

† *Dictionary of Statistics*, page 429.

660. It will be readily believed that violent deaths are not so frequent in Victoria now as in the early days of the gold discoveries. By the following figures, however, which, with the exception of those in the first line, have been extracted from the appendix to the 40th Report of the Registrar-General of England, such deaths appear still to be more common here than in any European country. Fatal accidents seem to occur with more frequency in Victoria than in any of the countries, and suicides than in any except Switzerland and Prussia. Homicide, relatively to population, appears to be more prevalent than in the United Kingdom, Norway, Sweden, Prussia, and Belgium, but to be much less rife than in Switzerland, Finland, Bavaria, or Italy. It must be remembered, however, that the proportions in the table (except in the case of Victoria) have been calculated in relation to the events occurring in one year only, and might not hold good if those in a series of years were taken into account:—

Violent deaths in Victoria and European countries.

DEATH RATE FROM VIOLENCE IN VICTORIA AND IN CERTAIN EUROPEAN COUNTRIES.*

Countries.	Proportion to 100,000 Living of Deaths from—			
	Violence of all kinds.	Accident and Negligence.	Homicide.	Suicide.
Victoria	107·8	93·5	2·4	11·9
Switzerland	92·4	68·9	3·9	19·6
United Kingdom†	77·5	69·7	1·6	6·2
England and Wales	75·7	66·7	1·7	7·3
Scotland	72·0	68·2	·1	3·7
Ireland	39·1	35·3	1·7	2·1
Norway	72·4	64·1	1·3	7·0
Finland	62·6	55·7	3·5	3·4
Sweden	61·9	50·7	2·0	9·2
Prussia	61·6	46·1	2·1	13·4
Bavaria	51·9	37·7	3·9	10·3
Belgium	48·3	38·5	1·6	8·2
Austria	47·1	...	...	11·3
Italy	24·0	14·9	5·4	3·7

661. The following table gives a statement of the number of cases of death and injury from accidents on the Government lines of railway during the twenty-five and a half years ended with 30th June, 1884, embracing the whole period of the existence of railways in Victoria:—

Railway accidents.

* The proportions have been calculated upon the occurrences in Victoria during the ten years, 1871 to 1880, in Norway during 1873, in Scotland during 1875, in Finland during 1874, in Prussia during 1875, and in other countries during 1876. The figures in the last column in a few instances differ from those of Dr. Morselli (*ante*), which have been calculated over a series of years.

† Including the shipping

DEATHS AND INJURIES FROM RAILWAY ACCIDENTS, 1859 TO
JUNE, 1884.

Year.	Total Number.	Passengers.			Servants of the Railway Department or of Contractors.			Others.		
		From causes beyond their own control.	From their own misconduct or want of caution.	Total.	From causes beyond their own control.	From their own misconduct or want of caution.	Total.	At crossings.	Trespassers.	Miscellaneous.
1859 to 1868	37	...	...	...	3	19	22	1	14	...
1869	4	...	...	...	...	2	2	...	1	1
1870	2	...	...	...	...	1	1	...	1	...
1871	6	...	...	...	...	2	2	...	2	2
1872	3	...	...	...	...	...	...	...	3	...
1873	...	...	...	...	...	...	...	...	...	...
1874	10	...	...	...	4	...	4	1	4	1
1875	11	...	...	...	...	6	6	...	4	1
1876	23	...	...	...	3	10	13	2	6	2
1877	22	...	1	1	3	10	13	...	8	...
1878	16	...	...	...	...	7	7	2	6	1
1879	21	...	...	...	1	8	9	2	9	1
1880	18	...	...	...	...	7	7	3	6	2
1881	34	4	4	8	...	14	14	3	8	1
1882	38	1	1	2	...	22	22	3	9	2
1883	32	...	5	5	...	9	9	6	10	2
1884 (6 months)	10	1	...	1	4	2	6	...	3	...
Total killed	287	6	11	17	18	119	137	23	94	16

PERSONS KILLED.

PERSONS INJURED.										
1859 to 1868	84	22	2	24	5	45	50	1	7	2
1869	...	...	...	...	...	...	...	...	...	...
1870	4	...	...	...	4	...	4	...	...	...
1871	3	...	...	...	...	1	1	...	1	1
1872	32	28	2	30	1	1	2	...	...	...
1873	1	...	...	...	...	1	1	...	...	...
1874	1	...	...	...	...	1	1	...	...	...
1875	8	...	...	...	6	1	7	...	1	...
1876	27	1	1	2	4	15	19	...	5	1
1877	49	36	...	36	3	5	8	1	2	2
1878	40	22	3	25	6	5	11	...	1	3
1879	45	7	2	9	11	20	31	3	1	1
1880	20	5	...	5	1	7	8	2	3	2
1881	64	46	4	50	1	10	11	...	2	1
1882	261	210	5	215	13	25	38	1	2	5
1883	101	67	8	75	7	12	19	2	1	4
1884 (6 months)	90	44	9	53	10	21	31	2	1	3
Total injured	830	488	36	524	72	170	242	12	27	25

PERSONS INJURED.

Railway passengers and servants killed and injured.

662. It will be observed that, in the whole period of twenty-five and a half years, 287 persons were killed and 830 were injured on the State lines of railway, and that, exclusive of trespassers, persons

crossing the lines, &c., 130 of the former and 206 of the latter met their death or injury in consequence of their own misconduct or want of caution. Of the persons killed throughout the period, 17 were passengers, and as many as 137 railway or contractors' servants; 11 of the former, and 119 of the latter, having suffered in consequence of their own carelessness. The passengers injured numbered 524, and the railway servants 242; as many as 170 of the latter, but only 36 of the former, suffered from their own action. At crossings 23 persons were killed, and 12 injured. As many as 94 trespassers were killed, 3 being in the year under review; these no doubt included persons who committed suicide by placing themselves in the way of trains. The trespassers injured numbered somewhat more than a fourth of those killed.

663. In the eleven years ended with 1884, embracing the whole Mining accidents. period during which the Regulation and Inspection of Mines and Machinery Statutes* have been in operation, 673 persons lost their lives, and 1,565 persons were injured, from accidents connected with mining operations. The following were the numbers in each year and their proportion to the number of miners at work :—

DEATHS AND INJURIES FROM MINING ACCIDENTS, 1874 TO 1884.

Year.	Average Number of Miners at work.	Number of Persons—			Numbers per 1,000 Miners at work—		
		Killed.	Injured.	Total.	Killed.	Injured.	Total.
1874	46,512	90	245	335	1.93	5.27	7.20
1875	42,058	83	217	300	1.97	5.16	7.13
1876	41,531	55	170	225	1.32	4.10	5.42
1877	38,860	64	154	218	1.65	3.96	5.61
1878	37,212	40	106	146	1.07	2.85	3.92
1879	37,195	48	112	160	1.29	3.01	4.30
1880	38,076	50	89	139	1.31	2.34	3.65
1881	38,436	72	108	180	1.87	2.81	4.68
1882	37,446	71	130	201	1.90	3.47	5.37
1883	33,927	59	128	187	1.74	3.77	5.51
1884	29,182	41	106	147	1.40	3.63	5.03
Means	38,221	61	142	203	1.59	3.71	5.30

664. In 1884, fatal mining accidents were fewer by 18, and non-fatal Mining accidents, 1884. ones were fewer by 22, than in 1883. In comparison with earlier years, the persons killed and injured in and in connexion with mines have much diminished both in numbers and in proportion to the miners at work.

* 37 Vict. No. 480, 41 Vict. No. 583, 45 Vict. No. 719, and 47 Vict. No. 783.

Mining accidents in Victoria and England.

665. According to the average of the eleven years to which reference is made, 1 miner in every 627 loses his life annually. In 1884 the proportion was 1 in 712. These proportions contrast favorably with the proportion for the metalliferous mines of Great Britain and Ireland, where, according to the report of Her Majesty's Inspectors of Mines for 1883, 1 person in every 584 employed in and about mines lost his life by accident during the year, and 1 in every 607 during the ten years 1874 to 1883. This is exclusive of accidents in coal mines, in respect to which the proportion of fatal accidents is much higher.

Causes of mining accidents.

666. It appears by the following table that, in the eleven years named, 1,096, or 49 per cent., of the mining accidents in Victoria were caused by the fall of earth or materials; 435, or 19 per cent., by falling down shafts, cage accidents, &c.; and 270, or 12 per cent., by explosions, principally of blasting charges:—

CAUSES OF MINING ACCIDENTS, 1874 TO 1884.

Nature of Accident.	Number of Persons—		
	Killed.	Injured.	Total.
Fall of earth or rock underground	260	494	754
" " on surface	96	73	169
" materials down shafts, passes, &c.	36	135	171
" " winzes, &c.	2	...	2
Falling down shafts	99	132	231
" " winzes, shoots, &c.	13	61	74
Cage accidents	43	87	130
Timber accidents	9	19	28
Truck accidents	4	38	42
Machinery in motion	17	63	80
Explosion of charges of gunpowder	16	115	131
" " guncotton	1	10	11
" " nitro-glycerine compounds	17	50	67
" stored explosives	6	28	34
" boilers	1	5	6
" fire damp	1	20	21
Foul air	6	...	6
Flooding of mines	23	...	23
Undescribed	23	235	258
Total	673	1,565	2,238

Causes of death of octogenarians.

667. The number of deaths of persons over 80 years of age, and their exact ages at death, have been already quoted for each of the years 1881 to 1884, and for the previous decade.* The following table shows the causes of death of these persons:—

* See table following paragraph 593 ante.

CAUSES OF DEATH OF OCTOGENARIANS.

Causes of Death.	Year 1884.		Year 1883.		Year 1882.		Year 1881.		Ten Years ended with 1880.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Quinsy ... ..	...	...	...	...	...	...	...	...	...	1
Diphtheria ... ..	...	...	...	...	1	...	...	...	...	...
Typhoid Fever, &c.	3	...	...	1	...	...	...	...	3	2
Erysipelas	1	...	...	1	3	...	1	1	2	6
Carbuncle, Boil ... ..	...	...	...	...	...	1	2	...	1	2
Influenza, Coryza, Catarrh	1	...	...	...	2	1	1	...	4	11
Dysentery and Diarrhœa... ..	10	8	11	8	8	9	9	3	42	33
Cholera ... ..	...	...	...	...	...	...	3	...	3	1
Rheumatism	1	...	1	1	1	1	1	...	6	4
Venereal Diseases ... ..	...	...	...	...	...	...	...	...	4	...
Privation... ..	...	...	...	...	1	...	1	...	2	...
Scurvy ... ..	...	...	...	...	...	...	...	...	1	...
Intemperance ... ..	...	...	...	...	...	...	...	...	2	1
Hydatid ... ..	...	...	...	...	...	...	...	...	1	...
Gout ... ..	...	1	1	...	...	...	...	...	2	...
Dropsy	2	2	...	4	2	3	4	2	16	16
Cancer	5	3	4	3	8	3	6	4	29	9
Tumor ... ..	...	...	...	...	1	...	...	...	...	3
Mortification ... ..	...	...	...	1	1	...	2	...	7	3
Phthisis	1	...	...	1	1	1	1	...	2	3
Abscess, &c. ... ..	...	...	...	...	...	...	...	...	1	...
Brain Diseases, &c.	22	17	19	13	16	11	26	20	110	83
Heart Diseases, &c.	18	10	11	10	9	6	16	9	50	37
Lung Diseases, &c.	29	23	27	25	42	25	23	16	160	100
Stomach Diseases, &c.	10	5	2	5	6	4	6	1	31	20
Kidney Diseases, &c.	7	1	7	3	7	1	13	...	34	1
Gennetic Diseases	1	...	...	...	...	...	...	...	...	1
Skin Diseases, &c. ... ..	...	...	...	...	...	...	...	1	4	1
Old Age	105	82	113	77	105	90	81	97	550	441
Accidents	5	4	2	4	6	4	3	4	19	14
Suicide ... ..	...	1	...	...	...	...	1	...	3	...
Unspecified causes ... ..	...	...	...	...	...	...	...	...	2	...
Total	221	157	198	157	220	160	200	158	1,091	793

668. It will be noticed that during the ten years, 1871-80, in the case of more than half of both the males and females no complaint was set down except old age. Little is to be learnt from such a vague definition, and it is much to be wished that medical men would endeavour to describe the causes of death with more precision. Of the remainder, about two-sevenths of both sexes died of diseases of the organs of respiration, chiefly pneumonia and bronchitis, and about one-fifth died of affections of the brain and nerves.

Complaints most fatal to octogenarians—1871-80.

669. The following table shows the number of males over 20 years of age of each occupation as returned at the last census, the number who died at that period of life in the three years of which the census

Occupations at death.

year was the middle from all causes and from phthisis, and the average annual proportion of such deaths to the numbers living :—

OCCUPATIONS OF ADULT MALES AT DEATH* FROM ALL CAUSES
AND FROM PHTHISIS, IN CLASSIFIED ARRANGEMENT.

Occupations.	Males over 20 Years—				
	Returned at Census (3rd April, 1881).	Who Died in Three Years, 1880 to 1882.		Who Died Annually per 1,000 Living.	
		From all Causes.	From Phthisis	From all Causes.	From Phthisis
I.—GOVERNMENTAL AND PROFESSIONAL.					
Public officers, civil servants	1,982	75	15	12·61	2·52
Police	1,102	41	12	12·40	3·63
Clergy (including irregular clergy) ...	884	48	12	18·10	4·52
Lawyers	534	40	5	24·97	3·12
Law clerks	336	13	3	12·90	2·98
Medical men (including irregular practitioners)	578	40	6	23·07	3·46
Chemists and druggists	623	51	10	27·29	5·35
School masters, teachers, tutors ...	2,123	91	18	14·29	2·83
Photographers	182	6	3	10·99	5·49
Music-masters, musicians, vocalists ...	439	30	6	22·78	4·55
II.—ENGAGED IN ENTERTAINING AND SERVING.					
Hotel-keepers, beer and colonial wine sellers	3,102	276	40	29·66	4·29
Servants	3,804	147	28	12·88	2·45
III.—ENGAGED IN COMMERCIAL PURSUITS, AND IN CONVEYANCE OF MEN AND GOODS.					
Capitalists, merchants	1,110	51	12	15·32	3·60
Auctioneers, appraisers, valuers... ..	249	14	3	18·74	4·02
Brokers, commission agents	1,477	71	14	16·02	3·16
Clerks—bank, commercial, and undefined... ..	3,955	267	115	22·50	9·69
Commercial travellers, salesmen... ..	945	38	10	13·40	3·53
Hawkers, pedlers	787	59	11	24·99	4·66
Shopkeepers, pawnbrokers, and other general dealers	3,248	198	25	20·32	2·56
Drapers, mercers, warehousemen, and assistants	2,829	135	47	15·91	5·54
Railway officers, clerks, station-masters ...	451	13	3	9·61	2·22
Railway engine-drivers, stokers, &c. ...	2,203	64	10	9·68	1·51
Coach, omnibus, cab—proprietors and drivers	2,152	101	16	15·64	2·48
Draymen, carriers, carters	4,831	165	22	11·38	1·52
Ship—masters, officers, seamen, servants ...	2,442	257	35	35·08	4·77
Store labourers, storemen, and others connected with storage	995	30	2	10·05	·67

* Elaborate tables, showing in Classes, Orders, and Sub-Orders the occupations at death at various ages of males in Melbourne and suburbs, in the extra-metropolitan towns, and in extra-urban districts, are given in the Statistical Register of Victoria, 1883, Part "Vital Statistics."

OCCUPATIONS OF ADULT MALES AT DEATH,* ETC.—*continued.*

Occupations.	Males over 20 Years—				
	Returned at Census (3rd April, 1881).	Who Died in Three Years, 1880 to 1882.		Who Died Annually per 1,000 Living.	
		From all Causes.	From Phthisis	From all Causes.	From Phthisis
IV.—ENGAGED ABOUT LAND AND ANIMALS.					
Engaged in agricultural pursuits ...	54,123	1,561	145	9·61	·89
" pastoral pursuits ...	6,157	192	14	10·39	·77
Land surveyors and assistants ...	231	14	1	20·20	1·44
Land, house—proprietors, agents ...	1,259	9	1	2·38	·26
Horsebreakers, grooms (not domestic servants)	1,103	93	14	28·11	4·23
Fishermen ...	481	24	2	16·63	1·39
V.—ENGAGED IN FOOD, DRINKS, AND STIMULANTS.					
Cowkeepers, dairymen, milksellers ...	709	28	2	13·16	·94
Butchers ...	3,281	149	14	15·14	1·42
Fishmongers, oyster dealers ...	201	9	1	14·93	1·66
Millers, corn, flour, meal—merchants, dealers	797	27	4	11·29	1·67
Bakers, confectioners ...	1,942	103	15	17·68	2·57
Greengrocers, fruiterers ...	361	15	2	13·85	1·85
Brewers, maltsters ...	503	25	2	16·57	1·32
Wine, spirit—merchants ...	128	8	1	20·83	2·60
Gingerbeer, aerated waters, cordial—manufacturers	247	13	2	17·54	2·70
Grocers, tea dealers ...	1,626	84	17	17·22	3·48
Tobacco manufacturers, tobacconists ...	360	12	2	11·11	1·85
VI.—ENGAGED IN BOOKS AND LITERATURE.					
Booksellers, stationers, news agents, vendors	539	20	6	12·37	3·71
Newspaper proprietors, editors, publishers	260	6	1	7·69	1·28
Printers, compositors ...	1,284	52	16	13·50	4·15
VII.—ENGAGED IN INDUSTRIAL PURSUITS.					
Watch, clock—makers, jewellers ...	791	45	15	18·96	6·32
Mechanical engineers, engine and machine workers, agents, dealers	740	20	12	9·01	5·40
Carriage, perambulator—makers, dealers...	991	32	11	10·75	3·70
Saddlers, whipmakers ...	995	48	5	16·08	1·68
Wheelwrights ...	579	27	3	15·54	1·73
Shipbuilders, shipwrights ...	412	28	2	22·65	1·62
Sail, tent, tarpaulin—makers ...	134	10	1	24·87	2·49
Architects ...	237	15	5	21·10	7·03
Builders, contractors ...	2,091	103	4	16·42	·64
Carpenters, joiners ...	5,784	331	42	19·08	2·42
Bricklayers, masons, slaters, plasterers ...	2,833	218	26	25·65	3·06
Painters, paperhangers, plumbers, glaziers	2,205	131	21	19·80	3·17

* See footnote (*) to preceding page.

OCCUPATIONS OF ADULT MALES AT DEATH,* ETC.—*continued.*

Occupations.	Males over 20 Years—				
	Returned at Census (3rd April, 1881).	Who Died in Three Years, 1880 to 1882.		Who Died Annually per 1,000 Living.	
		From all Causes.	From Phthisis	From all Causes.	From Phthisis
VII.—ENGAGED IN INDUSTRIAL PURSUITS—<i>continued.</i>					
Furniture makers, cabinetmakers, upholsterers	979	60	13	20·43	4·43
Dyers, scourers	74	8	2	36·04	9·01
Hairdressers, wigmakers	345	24	4	23·19	3·86
Hatters, capmakers, &c.	191	12	4	20·94	6·98
Tailors, clothes dealers, outfitters ...	1,573	120	25	25·43	5·30
Boot, shoe—makers	4,683	240	45	17·08	3·20
Fellmongers, tanners, curriers, leather manufacturers	1,026	25	4	8·12	1·30
Firewood—dealers, choppers	1,348	38	1	9·40	·25
Fencers, hurdle makers, splitters	1,336	41	1	10·23	·25
Turners	129	9	4	23·26	10·34
Coopers	344	23	...	22·29	...
Sawyers, sawmill owners	929	37	3	13·28	1·08
Miners	32,545	1,675	312	17·16	3·19
Charcoal burners	111	5	...	15·01	...
Quarrymen, stone cutters, dressers (not masons)	805	31	8	12·84	3·31
Brick, pottery, china, earthenware—makers	752	41	5	18·17	2·22
Road, railway—labourers, navvies, excavators	1,082	17	...	5·24	...
Tin, zinc—workers	472	17	2	12·01	1·41
Iron founders, workers	693	29	4	13·95	1·92
Blacksmiths, whitesmiths	3,409	161	23	15·74	2·25
Ironmongers, hardware dealers	465	19	6	13·62	4·30
Labourers (branch undefined)	18,680	2,216	248	39·54	4·42
Engineers, engine-drivers, stokers, firemen (undefined)	1,639	147	26	29·90	5·29
Other occupations	20,046	948	163	...	...
Unspecified	5,216	696	96	...	...
Total	235,619	12,412	1,891	17·56	2·67

Results not strictly accurate.

670. It should be mentioned that the comparison between the numbers returned at the census and the numbers dying, as given in the last column, is not entirely fair, as the occupations of the former being returned by the persons themselves are likely to be defined more exactly than those of the latter, which must necessarily be returned by others.

* See footnote (*) to page 296.

This will have the effect of unduly exaggerating the mortality of the more comprehensive groups and reducing that of the others.

671. Combining the occupations embraced in each class, and arranging the results in order of fatality, the classes stand as follow in regard to the deaths from all causes :—

Occupations at death from all causes, in classes.

OCCUPATIONS (IN CLASSES) OF ADULT MALES AT DEATH FROM ALL CAUSES, IN ORDER OF FATALITY.

			Annual Deaths per 1,000 Living.
1.	Engaged in industrial pursuits	...	21.89
2.	entertaining and serving	...	20.42
3.	commercial pursuits	...	17.62
4.	professional pursuits	...	16.51
5.	food and drinks	...	15.53
6.	books and literature	...	12.48
7.	on land and with animals	...	9.96

672. The following figures show that the order of fatality of the various classes of pursuits when the death occurs from phthisis differs greatly from that when the mortality is considered as a whole, as above :—

Occupations at death from phthisis, in classes.

OCCUPATIONS (IN CLASSES) OF ADULT MALES AT DEATH FROM PHTHISIS, IN ORDER OF FATALITY.

			Annual Deaths per 1,000 Living.
1.	Engaged in commercial pursuits	...	3.91
6.	books and literature	...	3.68
2.	professional pursuits	...	3.42
3.	entertaining and serving	...	3.28
4.	industrial pursuits	...	3.23
5.	food and drinks	...	2.05
7.	land and animals	...	.93

673. Commercial and literary pursuits appear to be favorable to the development of phthisis, as the mortality of persons engaged in the former rises from the third place, and that of the latter rises from the sixth place, in the previous list to the first and second places respectively in this. Professional pursuits also rise in the phthisis as compared with the general list, but industrial pursuits, and pursuits connected with entertaining and serving, and with food and drinks, fall. Rural pursuits occupy the lowest place in both lists, and therefore may be considered to be conducive not only to immunity from phthisis but to general longevity.

Occupations in phthisis and general list compared.

674. In the next table the occupations are arranged in order according to the degree of fatality from all causes and from phthisis which the figures show to have attended each occupation :—

Occupations at death, in order of fatality.

OCCUPATIONS OF ADULT MALES AT DEATH FROM ALL CAUSES AND FROM
PHTHISIS, IN ORDER OF FATALITY.

Males over 20 Years who Died 1880 to 1882 from—					
Order of Fatality.	All Causes.			Phthisis.	
	Occupations.	Annual Deaths per 1,000 Living.		Occupations.	Annual Deaths per 1,000 Living.
1	Labourers (branch undefined)* ...	39·54		Turners	10·34
2	Dyers, scourers	36·04		Clerks—bank, commercial, and un- defined †	9·69
3	Ship—masters, officers, seamen, ser- vants	35·08		Dyers, scourers	9·01
4	Engineers, engine-drivers, stokers, firemen (undefined) †	29·90		Architects	7·03
5	Hotel-keepers, beer and colonial wine sellers	29·66		Hatters, capmakers	6·98
6	Horsebreakers, grooms (not domestic servants)	28·11		Watch, clock—makers, jewellers ...	6·32
7	Chemists and druggists	27·29		Drapers, mercers, warehousemen, and assistants	5·54
8	Bricklayers, masons, slaters, plas- terers	25·65		Photographers	5·49
9	Tailors, clothes dealers, outfitters ...	25·43		Mechanical engineers, engine and machine workers, agents, and dealers	5·40
10	Hawkers, pedlers	24·99		Chemists and druggists	5·35
11	Lawyers	24·97		Tailors, clothes dealers, outfitters ...	5·30
12	Sail, tent, tarpaulin—makers ...	24·87		Engineers, engine-drivers, stokers †	5·29
13	Turners	23·26		Ship—masters, officers, seamen, ser- vants	4·77
14	Hairdressers, wigmakers	23·19		Hawkers, pedlers	4·66
15	Medical men (including irregular practitioners)	23·07		Music-masters, musicians, vocalists	4·55
16	Music-masters, musicians, vocalists	22·78		Clergy (including irregular clergy)	4·52
17	Shipbuilders, shipwrights ...	22·65		Furniture makers, cabinetmakers, upholsterers	4·43
18	Clerks—bank, commercial, and un- defined †	22·50		Labourers (branch undefined)* ...	4·42
19	Coopers	22·29		Ironmongers, hardware dealers ...	4·30
20	Architects	21·10		Hotel-keepers, beer and colonial wine sellers	4·29
21	Hatters, capmakers	20·94		Horsebreakers, grooms (not domestic servants)	4·23
22	Wine, spirit—merchants	20·83		Printers, compositors	4·15
23	Furniture makers, cabinetmakers, upholsterers	20·43		Auctioneers, appraisers, valuers ...	4·02
24	Shopkeepers, pawnbrokers, and other general dealers	20·32		Hairdressers, wigmakers	3·86
25	Land surveyors and assistants ...	20·20		Booksellers, stationers, news agents, vendors	3·71
26	Painters, paperhangers, plumbers, glaziers	19·80		Carriage, perambulator—makers, dealers	3·70

* See also Pastoral labourers, lines 70 and 73; Store labourers, lines 72 and 74; Agricultural labourers, lines 74 and 72; Road and railway labourers, lines 79 and 81, &c.

† See also Railway engine-drivers, &c., lines 73 and 62, and Mechanical engineers, &c., lines 76 and 9.

‡ See also Law clerks, lines 58 and 39; Government clerks, lines 61 and 46; and Railway clerks, lines 74 and 51.

OCCUPATIONS OF ADULT MALES AT DEATH, ETC.—*continued.*

Males over 20 Years who Died 1880 to 1882 from—					
Order of Fatality.	All Causes.			Phthisis.	
	Occupations.	Annual Deaths per 1,000 Living.		Occupations.	Annual Deaths per 1,000 Living.
27	Carpenters, joiners	19·08		Police	3·63
28	Watch, clock—makers, and jewelers, &c.	18·96		Capitalists, merchants	3·60
29	Auctioneers, appraisers, valuers ...	18·74		Commercial travellers, salesmen ...	3·53
30	Brick, pottery, china, earthenware—makers	18·17		Grocers, tea dealers	3·48
31	Clergy (including irregular clergy)...	18·10		Medical men (including irregular ditto)	3·46
32	Bakers, confectioners	17·68		Quarrymen, stone-cutters, dressers (not masons)	3·31
33	Gingerbeer, aerated waters, cordial—manufacturers	17·54		Boot, shoe—makers	3·20
34	Grocers, tea dealers	17·22		Miners	3·19
35	Miners	17·16		Painters, paperhangers, plumbers, glaziers	3·17
36	Boot, shoe—makers	17·08		Brokers, commission agents ...	3·16
37	Fishermen	16·63		Lawyers	3·12
38	Brewers, maltsters	16·57		Bricklayers, masons, slaters, plasterers	3·06
39	Builders, contractors	16·42		Law clerks	2·98
40	Saddlers, whipmakers	16·08		School masters, teachers, tutors ...	2·83
41	Brokers, commission agents ...	16·02		Gingerbeer, aerated waters, cordial—makers	2·70
42	Drapers, mercers, warehousemen, and assistants	15·91		Wine, spirit—merchants	2·60
43	Blacksmiths, whitesmiths	15·74		Bakers, confectioners	2·57
44	Coach, omnibus, cab—proprietors, drivers	15·64		Shopkeepers, pawnbrokers, and other general dealers	2·56
45	Wheelwrights	15·54		Public officers, civil servants ...	2·52
46	Capitalists, merchants	15·32		Sail, tent, tarpaulin—makers ...	2·49
47	Butchers	15·14		Coach, omnibus, cab—proprietors, drivers	2·48
48	Charcoal burners	15·01		Servants	2·45
49	Fishmongers, oyster dealers ...	14·93		Carpenters, joiners	2·42
50	School masters, teachers, tutors ...	14·29		Blacksmiths, whitesmiths	2·25
51	Iron founders, workers	13·95		Railway officers, clerks, station-masters	2·22
52	Greengrocers, fruiterers	13·85		Brick, pottery, china, earthenware—makers	2·22
53	Ironmongers, hardware dealers ...	13·62		Iron founders, workers	1·92
54	Printers, compositors	13·50		Greengrocers, fruiterers	1·85
55	Commercial travellers, salesmen ...	13·40		Tobacco manufacturers, tobacconists	1·85
56	Sawyers, sawmill owners... ..	13·28		Wheelwrights	1·73
57	Cowkeepers, dairymen, milksellers...	13·16		Saddlers, whipmakers	1·68
58	Law clerks	12·90		Millers, corn, flour, meal—merchants, dealers	1·67
59	Servants	12·88		Fishmongers, oyster dealers ...	1·66
60	Quarrymen, stone cutters, dressers (not masons)	12·84		Shipbuilders, shipwrights ...	1·62

OCCUPATIONS OF ADULT MALES AT DEATH, ETC.—*continued.*

Males over 20 Years who Died 1880 to 1882 from—					
Order of Fatality.	All Causes.			Phthisis.	
	Occupations.	Annual Deaths per 1,000 Living.	Occupations.	Annual Deaths per 1,000 Living.	
61	Public officers, civil servants, Government clerks	12·61	Draymen, carriers, carters ...	1·52	
62	Police	12·40	Railway engine-drivers, stokers, &c.	1·51	
63	Booksellers, stationers, news agents, vendors	12·37	Land surveyors and assistants ...	1·44	
64	Tin, zinc—workers	12·01	Butchers	1·42	
65	Draymen, carriers, carters ...	11·38	Tin, zinc—workers	1·41	
66	Corn, flour, meal—merchants, dealers, and millers	11·29	Fishermen	1·39	
67	Tobacco manufacturers, tobacconists	11·11	Brewers, maltsters	1·32	
68	Photographers	10·99	Fellmongers, tanners, curriers, leather manufacturers	1·30	
69	Carriage, perambulator—makers, dealers	10·75	Newspaper proprietors, editors, publishers	1·28	
70	Engaged in pastoral pursuits ...	10·39	Sawyers, sawmill owners... ..	1·08	
71	Fencers, hurdle makers, splitters ...	10·23	Cowkeepers, dairymen, milksellers... ..	·94	
72	Store labourers, storemen, and others connected with storage	10·05	Engaged in agricultural pursuits ...	·89	
73	Railway engine-drivers, stokers, &c.	9·68	Engaged in pastoral pursuits ...	·77	
74	Engaged in agricultural pursuits ...	9·61	Store labourers, storemen, &c. ...	·67	
75	Railway officers, clerks, station-masters	9·61	Builders, contractors	·64	
76	Firewood—dealers, choppers ...	9·40	Land, house—proprietors, agents ...	·26	
77	Mechanical engineers, engine and machine workers, agents, and dealers	9·01	Fencers, hurdle makers, splitters ...	·25	
78	Fellmongers, tanners, curriers, and leather manufacturers	8·12	Firewood—dealers, choppers ...	·25	
79	Newspaper proprietors, editors, publishers	7·69	Coopers ... ..	...
80	Road, railway—labourers, navvies, excavators	5·24	Charcoal burners ... ..	...
81	Land, house—agents, proprietors ...	2·38	Road, railway—labourers, navvies, excavators	...	
	Total	17·56	... ..	2·67

Fatality from all causes of different occupations.

675. According to this table, the general mortality presses more hardly upon labourers (branch undefined) than upon followers of any other occupation; but this is an instance in which fallacious results are doubtless arrived at in consequence of the difference in the manner of describing the occupation during life and after death. Many of the 2,216 undefined labourers who died would probably be returned at the census under the special industry in connexion with which they worked: *e.g.*, store labourers, farm or station labourers, road or railway labourers, &c. The fact of their being entered simply as "labourers"

in the death registers would of course swell the mortality under the head of labourers undefined (line 1), and to the same extent would lower that under the other heads (lines 70, 72, 74, and 80). The same remark applies to engineers, engine-drivers, stokers, &c., undefined (line 4), many of whom at the census would probably be returned in connexion with railways or mechanical engineering, under both of which heads an exceedingly low mortality is shown by the figures (lines 73 and 77). In reference to the high mortality amongst seamen (line 3), it must be remembered that the population with which it is compared is a fluctuating one, and may perhaps on the average be larger than it was at the census; and, moreover, that ships often leave sick seamen behind them here to be attended to in hospital or otherwise. The mortality really appears to be high amongst hotel-keepers, horse-breakers and grooms, chemists and druggists, bricklayers and masons, tailors, and hawkers (lines 5 to 10). Of members of the learned professions, the greatest mortality appears to attend lawyers (line 11); medical men (line 15) being somewhat less, and clergymen (line 31) very much less, hardly pressed upon. The mortality of clerks (line 18) appears to be high, but this may be swelled by the inclusion of law clerks, who should be grouped as such (line 58), Government clerks, who should be grouped with public officers (line 61), and railway clerks, who should be grouped with railway officers (line 75), in reference to all of whom a very low mortality is shown. The mortality of the police (line 62) is low, but it must be remembered that the retiring age of policemen is 55 years, or sooner if incapacitated from active duty, and it is probable that many who have been in the police force are not attached to it at the time of their death. The occupations in which the mortality is lowest appear to be land and house proprietors (line 81), newspaper proprietors and editors (line 79), and fellmongers and tanners (line 78); but the numbers in these groups are small, and the results consequently of but doubtful value.

676. The phthisis columns of the table show that the mortality from that complaint presses more heavily upon persons engaged in sedentary or indoor pursuits than the general mortality, as will be noticed from the following examples :—

Fatality from phthisis of different occupations.

	Place on General list.	Place on Phthisis list.
Turners	13	1
Clerks	18	2
Architects	20	4
Hatters	21	5
Watchmakers	28	6
Drapers	42	7
Photographers	68	8
Mechanical engineers	77	9
Clergymen	31	16

Turners are at the head of the phthisis list, but it should be mentioned the numbers are small—9 altogether, of whom 4 died of phthisis—and their position may be accidental. The same remark applies to dyers, of whom 8 died, 2 from phthisis, and which occupy a very high position on both lists. Clergymen, who are much below medical men and lawyers in the general list, rise much above them in the phthisis list; and lawyers, who were above members of the other learned professions in the general list, sink considerably below them in the phthisis list. Labourers, who stand at the head of the general list—for which a reason was given in the last paragraph—sink, notwithstanding that reason, to the eighteenth place in the phthisis list. Hotel-keepers fall from the fifth place in the general to the twentieth place in the phthisis list. It will be noticed that the twelve occupations standing lowest on the phthisis list are—with the exception of land and house proprietors or agents, which would probably not generally be returned as such at death—all such as are carried on out of doors.

Sickness and
deaths in
general
hospitals.

677. There are 38 general hospitals in Victoria, 9 of which are also benevolent asylums. The total number of cases of sickness treated in these institutions during the year ended 30th June, 1884, was 14,293, and the number of deaths was 1,551. In the previous twelve months the cases of sickness treated numbered 14,649, and the deaths 1,546. There was thus 1 death to every 9·2 cases of sickness treated in hospitals during the year 1884, as against 1 death to every 9·5 cases of sickness treated therein during the previous year. The following table gives a list of the various hospitals throughout the colony, also a statement of the number of cases treated, the number of deaths which occurred, in the year ended 30th June, 1884, and the proportion of deaths to cases in each hospital during that and the previous year:—

SICKNESS AND MORTALITY IN GENERAL HOSPITALS.

Name of Hospital.	Year ended 30th June, 1884.			Percentage of Mortality to Cases treated, Year ended 30th June, 1883.
	Number of Cases treated.	Number of Deaths.	Percentage of Mortality to Cases treated.	
Alexandra	22	3	13·64	10·34
Amherst	247	24	9·72	11·11
Ararat	381	14	3·67	8·52
Ballarat	754	89	11·80	12·56
Beechworth	435	41	9·43	11·52
Belfast	44	3	6·82	11·32
Bendigo	1,282	148	11·54	8·68
Castlemaine	679	53	7·81	6·42
Clunes	203	9	4·43	7·97
Colac	34	5	14·71	16·28

SICKNESS AND MORTALITY IN GENERAL HOSPITALS—*continued.*

Name of Hospital.	Year ended 30th June, 1884.			Percentage of Mortality to Cases treated, Year ended 30th June, 1883.
	Number of Cases treated.	Number of Deaths.	Percentage of Mortality to Cases treated.	
Creswick	290	19	6.55	9.70
Daylesford	151	18	11.92	11.70
Dunolly	257	24	9.34	7.59
Echuca	193	13	6.74	4.51
Geelong	796	86	10.80	10.66
Hamilton	201	18	8.96	4.58
Heathcote	79	7	8.86	12.66
Horsham	191	17	8.90	7.80
Inglewood	477	42	8.81	8.07
Kilmore	130	12	9.23	10.60
Kyneton	450	13	2.89	5.83
Maldon	61	7	11.47	12.86
Mansfield	105	...	...	9.35
Maryborough	385	30	7.79	8.82
Melbourne	3,425	541	15.80	15.22
Melbourne (Alfred)	1,132	127	11.22	11.37
Melbourne (Austin)*	104	27	25.96	...
Melbourne (Homœopathic)	127	13	10.24	8.76
Mooroopna	329	35	10.64	7.91
Nhill	56	4	7.14	...
Pleasant Creek (Stawell)	203	17	8.37	3.45
Portland	47	9	19.15	9.19
Sale	283	33	11.66	5.63
St. Arnaud	242	21	8.68	11.11
Swan Hill	97	7	7.22	7.35
Wangaratta	216	10	4.63	9.76
Warrnambool	91	8	8.79	6.45
Wood's Point	94	4	4.26	1.94
Total	14,293	1,551	10.85	10.55

678. In proportion to the cases treated, the greatest mortality occurred in the Austin (Melbourne),* Portland, Melbourne, Colac, and Alexandra Hospitals; and the least in the Mansfield (where there were no deaths), and in the Kyneton, Ararat, Wood's Point, Clunes, and Wangaratta Hospitals. In 1882-3 the rate of mortality was highest in the Colac, Melbourne, Maldon, Heathcote, and Ballarat Hospitals; and lowest in the Wood's Point, Pleasant Creek, Echuca, and Hamilton Hospitals.

Highest and lowest death rates.

679. The patients treated in the Hospital for Diseases of Women and Children attached to the Lying-in Hospital numbered 401 during the year 1882-3, and 360 in 1883-4. The deaths in the same institution numbered 20 in both years. Therefore, 1 patient in 20 died in 1882-3, and 1 in 18 in 1883-4.

Sickness and deaths in hospital for women.

680. In the Melbourne Lying-in Hospital 602 women were confined in 1882-3, and 583 in 1883-4. Seven died in the former period, and 19

Deaths of mothers in Lying-in Hospital.

* For incurables.

in the latter. Thus, 1 woman in 86 died in 1882-3, and 1 woman in 31 in 1883-4. From the founding of the institution to the end of June, 1884, 11,321 women were accouched therein,* of whom 172 died, or 1 death to every 66 confinements.†

Deaths of infants in Lying-in Hospital. 681. The infants born alive in the Lying-in Hospital numbered 538 in the year 1882-3, and 542 during the year 1883-4, and of these, 38 in the former and 50 in the latter period died before being taken from the institution; thus 1 infant in 14 died in 1882-3, and 1 infant in 11 in 1883-4.‡

Sickness and deaths in Children's Hospital. 682. In the Melbourne Hospital for Sick Children 584 cases were treated, and 54 deaths occurred, in the year 1882-3; 566 cases were treated, and 26 deaths occurred, during the year 1883-4. These numbers furnish proportions of 1 death to every 11 patients in the former, and 1 death to every 22 patients in the latter, period.

Sickness and deaths in benevolent asylums. 683. Cases of sickness in benevolent asylums (exclusive of Melbourne Immigrants' Home) numbered 2,690 in 1882-3, and 1,826 in the year 1883-4; deaths numbered 183 and 204. The deaths were thus to the cases treated in the proportion of 1 to 14 in 1882-3, and of 1 to 9 in 1883-4.

Sickness and deaths in Immigrants' Home. 684. In the Melbourne Immigrants' Home the cases of sickness in the year 1882-3 amounted to 519, and the deaths to 85, or 1 death to every 6 cases of sickness. In the year 1883-4 the cases of sickness in this institution numbered 545, and the deaths 76, or 1 death to every 7 cases of sickness.

Sickness and deaths in orphan asylums. 685. In 1882-3 the cases of sickness in orphan asylums numbered 169, and the deaths 4. In the year ended 30th June, 1883-4, these numbers were 142 and 6 respectively. Thus, in 1882-3, 1 death occurred to every 42 cases of sickness, and, in 1883-4, 1 death to every 24 cases of sickness.

Sickness and deaths in lunatic asylums. 686. In hospitals for the insane during 1883, the cases of sickness numbered 1,209, and during 1884 they numbered 1,102. The deaths amounted to 189 at the former period, and 209 at the latter, or an average of 1 death to every $6\frac{1}{2}$ cases of sickness in 1883, and 1 to every 5 cases in 1884.

Sickness and deaths in gaols. 687. In gaols and penal establishments 753 cases of sickness occurred in 1883, and 865 in 1884. The deaths in these two periods respectively were 39 and 48. Thus, 1 death occurred to every 19 cases in 1883, and 1 death to every 18 cases in 1884.

* Including a few women who were accouched outside the hospital by midwives connected with the institution.

† See paragraph 637 *ante*.

‡ See paragraph 583 *ante*.

688. Altogether the number of deaths in penal or charitable institutions during 1884* was 2,254, being in the proportion of 1 to every 6 deaths which took place in Victoria during the year. The deaths in such institutions in 1882-3 were in the proportion of 1 to every 6 deaths; in the first six months of 1882 in the proportion of 1 to every 5½ deaths; in 1881 in the proportion of 1 to every 5⅓ deaths; in the four years, 1877-80, in that of 1 to every 6; in 1876 in that of 1 to every 6½; in 1875 in that of 1 to every 7⅓; and in 1874 and 1873 in that of 1 to every 6 deaths which took place in the whole colony. The following are the names of the institutions and the number of deaths which occurred in each during the year 1883-4 :—

DEATHS IN PUBLIC INSTITUTIONS, 1883-4.

	Number of Deaths.
General hospitals	1,551
Hospital for Diseases of Women and Children ...	20
Lying-in Hospital	69†
Hospital for Sick Children	26
Benevolent asylums	204
Melbourne Immigrants' Home	76
Orphan asylums	6
Deaf and Dumb Institution	1
Hospitals for the insane	209
Female refuges	17‡
Victorian Infant Asylum	5
Industrial and reformatory schools	22§
Gaols (exclusive of Police gaols)	44
Penal establishments	4
Total	2,254

NOTE.—In 1883-4 no death occurred in the Blind Asylum or the Eye and Ear Hospital.

689. In England and Wales during 1882, 1 out of every 10 deaths registered occurred in a workhouse, hospital, or lunatic asylum. Of such deaths, 63 per cent. occurred in the first of these institutions, 28 per cent. in the second, and 9 per cent. in the third.

690. The householder's schedule used at the census of 1881 contained a column headed "Health," respecting which an instruction was given

* The figures relating to hospitals for the insane, industrial and reformatory schools, gaols, and penal establishments are for the year ended 31st December, and those relating to the other institutions are for the year ended 30th June, 1884.

† This includes the deaths of 50 infants born in the institution.

‡ This includes the deaths of 15 infants in the Female Refuge, Madeline-street.

§ Including deaths of boarded-out children.

to the effect that, if any person was unable to follow his usual occupation by reason of illness or accident, or was afflicted with deafmuteism, blindness, lunacy, idiocy, epilepsy, or leprosy,* the name of such infirmity should be entered. As the result of this inquiry, the following information was obtained:—

SICKNESS AND INFIRMITY, 1881.

	Males.	Females.	Total.
Suffering from sickness	7,381	5,822	13,203
" " accident	1,162	202	1,364
" " deafmuteism	168	119	287
" " blindness	502	240	742
" " lunacy	1,590	1,243	2,833
" " idiocy	108	53	161
" " epilepsy... ..	176	114	290
" " lameness, mutilation, deformity, &c.†	83	49	132
Total	11,170	7,842	19,012

Proportion of infirm to population. 691. The total numbers furnish a proportion of 221 persons suffering from infirmity in every 10,000 of the population, of 247 infirm males in every 10,000 males, of 191 infirm females in every 10,000 females.

Sickness and accidents. 692. The sick were in the proportion of 153, and those laid up in consequence of accidents were in that of 16, to every 10,000 of the population. The two combined, representing those entirely disabled for the time being, but not as a rule permanently affected, were thus in the proportion of 169 to every 10,000 living, or 1 in 59. A similar combination gives a proportion of 189 disabled males in every 10,000 males living, or 1 in 53; of 147 disabled females in every 10,000 females living, or 1 in 68.

Disablement in Australasian colonies. 693. All the Australasian colonies except New South Wales obtained returns of sickness and accidents, those for New Zealand, however, applying only to persons over 15 years of age, and therefore not comparable with the others. Omitting the two colonies named, Queensland shows the smallest proportion of persons laid up from these causes, and South Australia and Tasmania the largest, next to which comes Victoria. The following are the proportions, the colonies being

* No case of leprosy was returned either in 1871 or 1881. It is known that this infirmity existed at both periods, to a small extent, among the Chinese; but the sub-enumerators did not distinguish it from ordinary sickness.

† The information in this line was not asked for, and is no doubt incomplete.

arranged in order, the one with the lowest ratio of disablement being placed first, and that with the highest last:—

SICKNESS AND ACCIDENTS IN AUSTRALASIAN COLONIES, 1881.

	Persons.
1. Queensland had 1 person disabled from sickness or accident in every	211
2. Western Australia " " " " "	68
3. Victoria " " " " "	59
4. { South Australia " " " " "	58
{ Tasmania " " " " "	58

694. New Zealand, as has just been stated, returned those disabled persons only who were over 15 years of age. These were in the very low proportion of 1 in 89 of the population at the same period of life. A proportion calculated upon the Victorian returns at a similar age gives 1 disabled person in 42. Disablement in New Zealand.

695. The loss suffered by the community in consequence of physical disablement is probably realized by few. Taking the sick and those suffering from accidents together, there were in Victoria, on the census day, 14,567 persons—viz., 8,543 males and 6,024 females—in a disabled condition; which means that the children were obliged to discontinue their studies, the men their work or business, and the women their household or other duties for that day, on account of illness or bodily injury. Supposing the census day to have been an average one as regards the amount of infirmity prevailing, which there is no reason to believe it was not, there would obviously in one year be an amount of work lost from this cause equal to that of 1 person for 14,567 years, or of 1 male for 8,543 years, and of 1 female for 6,024 years. Or, putting it in other words, there would, if Sundays be included, be 5,316,955 days' work lost on account of illness in the year, viz., 3,118,195 by males, and 2,198,760 by females; or, if Sundays be not included, there would be 4,559,471 days' work lost, viz., 2,673,959 by males, and 1,885,512 by females. This is altogether irrespective of the loss occasioned by illnesses of a slight or partial character, not serious enough to cause work to be altogether discontinued, which, according to instructions, would not be returned, or of the loss to others occasioned by attendance on sick persons, or by reason of deafmuteism, blindness, lunacy, &c. Loss by physical disablement.

696. According to the figures, the average number of days' disabling infirmity in the course of one year experienced by each person in the community is 6.2, or 6.9 days by each male, and 5.3 days by each female. If working days only be considered, each person, on the average, loses by this 5.3 such days, each male losing 5.9 such days, and each female 4.6 such days. Disablement of males and females.

Disablement
at different
ages.

697. The variation in the liability to sickness and accident at different ages may be traced in the following table, which shows the proportion of males and females rendered non-effective by these causes at each quinquennial age-period:—

DISABLEMENT FROM SICKNESS AND ACCIDENTS AT EACH AGE,
3RD APRIL, 1881.

Ages.				Number of Disabled Persons per 10,000 Living at each Age.	
				Males.	Females.
Under 5 years	...	...	...	63·60	53·44
5 to 10	„	...	...	65·62	55·48
10 „ 15	„	...	...	76·98	68·88
15 „ 20	„	...	...	86·80	86·64
20 „ 25	„	...	...	93·10	114·18
25 „ 30	„	...	...	114·11	126·38
30 „ 35	„	...	...	138·56	148·99
35 „ 40	„	...	...	177·15	168·38
40 „ 45	„	...	...	202·99	220·11
45 „ 50	„	...	...	268·35	241·04
50 „ 55	„	...	...	323·56	320·11
55 „ 60	„	...	...	505·49	390·64
60 „ 65	„	...	...	684·32	563·19
65 „ 70	„	...	...	1,027·44	781·44
70 „ 75	„	...	...	1,473·55	1,104·93
75 „ 80	„	...	...	1,975·05	1,494·63
80 and upwards	...	...	...	2,559·42	1,907·07
All ages	...	...	...	188·97	146·83

Disablement
increases
with age.

698. By the proportions in this table it is ascertained that, according to the numbers on the census day found to be laid up by reason of sickness or injury, the amount of physical disablement likely to be experienced both by males and females increases at every period of age from 5 years to the end of life.

Disablement
in friendly
societies.

699. Members of Friendly Societies, noting the increased tendency to indisposition as age advances, will recognise the desirability of encouraging young men to join their ranks, and the absolute necessity, if they are to remain solvent, of accumulating funds before the members advance in life. The census day being accepted as a normal one in point of the illness prevailing, the figures show that in this colony men between 20 and 25 years of age are liable to be laid up for about 3 working days in the year, men between 25 and 30 for $3\frac{2}{3}$ such days, and men between 30 and 35 for $4\frac{1}{3}$ such days; whereas men between 55 and 60 would probably be laid up for 16 working days in the year, men between 60 and 65 for $21\frac{1}{2}$ such days, and men between 65 and 70 for 32 such days. In most Friendly Societies, 18 years of age is the

youngest period at which members can be admitted, but in practice few join before 20 ; the census figures give an experience for males of 20 years of age and upwards of 9·3 days' disablement during the year. It argues well for the effectiveness of the medical examination to which candidates for membership of these bodies are subjected, and of the supervision exercised over members claiming sick pay, that the returns of Friendly Societies show that in 1881 the average amount of sickness for which payment was claimed in the year was only 7·8 working days per member, or $1\frac{1}{2}$ days less than the average shown by the census. It must, however, be borne in mind that the mean age of members of Friendly Societies is in all probability younger than that of the general population over 20; also, that as some members do not draw their sick allowance, the sickness for which payment is made is less than that actually experienced; and, moreover, that members of Friendly Societies are, as a rule, above the average of the population in point of provident habits and regularity of conduct, and that the medical examination which, as has been stated, they are obliged to undergo prior to their being admitted, affords a guarantee that, at that time at any rate, they are also above the average in regard to soundness of health.

700. The deafmutes, the blind, the lunatics, the idiots, and the crippled, maimed, and deformed persons represent those having some defect or injury which is generally permanent, but which often does not disable them from following some description of labour, and does not always prevent them from earning their own livelihood, although no doubt in most cases it seriously affects their usefulness to the community. These numbered 4,445, viz., 2,627 males and 1,818 females, or 1 person in every 194, 1 male in every 172, and 1 female in every 226. Permanent infirmities.

701. The deaf and dumb were in the proportion of 3·33 per 10,000 persons living; of 3·72 deaf and dumb males per 10,000 males, and of 2·90 deaf and dumb females per 10,000 females. These proportions, stated in other words, are 1 deafmute in 3,005 of the total population, 1 in 2,691 of the males, and 1 in 3,448 of the females. Deafmute-ism.

702. Deafmuteism is increasing in Victoria, which is only natural, considering that the population was formerly, much more than at present, made up of immigrants of whom probably few or none would be deaf and dumb. The increase was much greater between 1861 and 1871 than between 1871 and 1881, as will be seen by the following figures:— Increase of deafmuteism.

DEAFMUTEISM AT THE LAST THREE CENSUSES.

In 1861 there was 1 deafmute in every	...	9,005 persons.
„ 1871 „ „ „ „	...	3,621 „
„ 1881 „ „ „ „	...	3,005 „

703. The proportion even now is not nearly so high as that obtaining in England and Wales, where, according to the returns of the census of 1881 (after a correction being made for omissions), there was 1 deaf-mute in every 1,746 of the population; which proportion was about the same as in 1871, when 1 in every 1,748 of the population of England and Wales was a deafmute.*

704. Five of the colonies of this group have obtained returns of deafmuteism, those which have not done so being New South Wales and Queensland. In proportion to population, this affliction is found to be more common in Victoria than in New Zealand, Western Australia, or South Australia, but much less so than in Tasmania, in which the proportion was higher than that in England and Wales. The following are the proportions in the five colonies named, which are arranged in order, the colony in which deafmuteism is least prevalent being placed first, and the others in succession:—

DEAFMUTEISM IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 deafmute in every	...	4,298 persons.
2. Western Australia	”	4,244 ”
3. South Australia	”	3,448 ”
4. Victoria	”	3,005 ”
5. Tasmania	”	1,837 ”

705. Blind persons were in the proportion of 8·60 per 10,000 persons living; blind males in that of 11·10 to every 10,000 males; blind females in that of 5·85 to every 10,000 females. There was thus 1 blind person in every 1,162 of mixed sexes, or 1 blind male in every 901 males, and 1 blind female in every 1,709 females.

706. According to the census figures, blindness is increasing in Victoria, the reason probably being similar to that mentioned as having, perhaps, led to the increase of deafmuteism.† As in the case of the latter affliction, the increase was much smaller between 1871 and 1881 than between 1861 and 1871. The proportions at the three periods are subjoined:—

BLINDNESS AT THE LAST THREE CENSUSES.

In 1861 there was 1 blind person in every	...	4,288 persons.
” 1871	”	1,457 ”
” 1881	”	1,162 ”

707. In England and Wales, according to the census of 1881, the proportion of blind persons to the total population was 1 in 1,138, or higher than it has ever been in Victoria; not, however, so high as the proportion obtaining in England and Wales at the three previous

* See General Report on the Census of England and Wales, 1881, page 63. London: Eyre and Spottiswoode, 1883.

† See paragraph 702 *ante*.

censuses—for in 1871 it was 1 in 1,052; in 1861, 1 in 1,037; and in 1851 as high as 1 in 979.*

708. Returns of blindness were obtained by the same five colonies which obtained returns of deafmuteism. It is found that in New Zealand the proportion of blind persons was extremely low, and in South Australia it was lower than in Victoria, but in Western Australia and Tasmania it was enormously high—much higher than in England and Wales. The following are the proportions in these colonies, the colony in which the proportion was lowest being placed first, and the rest in order:—

Blindness in Australasian colonies.

BLINDNESS IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 blind person in every	...	3,550 persons.
2. South Australia	..	1,417 "
3. Victoria	..	1,162 "
4. Western Australia	..	725 "
5. Tasmania	..	625 "

709. Lunatics were in the proportion of 32·85 per 10,000 of the population, viz., 35·17 male lunatics per 10,000 males living, and 30·30 female lunatics per 10,000 females living. Thus 1 person in every 304, 1 male in every 284, 1 female in every 330, was a lunatic.

Lunacy.

710. According to the following proportions, lunacy, like deafmuteism and blindness, is increasing in Victoria:—

Increase of lunacy.

LUNACY AT THE LAST THREE CENSUSES.

In 1861 there was 1 lunatic in every	...	819 persons.
„ 1871	..	392 "
„ 1881	..	304 "

711. From whatever cause, lunacy appears to be much more rife in Victoria than in England and Wales. When the census of 1881 was taken, the proportion in the latter was 1 lunatic in every 502 of the population, which is a much lower proportion than that found to exist in Victoria at the same census.†

Lunacy in England and Wales.

712. The only Australasian colonies besides Victoria which have collected complete returns of lunacy apart from idiocy are New Zealand, South Australia, and Tasmania, in all of which the proportion is lower than in this colony, as will be seen by the following figures:—

Lunacy in Australasian colonies.

LUNACY IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 lunatic in every	...	437 persons.
2. South Australia	..	436 "
3. Tasmania	..	334 "
4. Victoria	..	304 "

* See General Report on the Census of England and Wales, 1881, page 60.

† See General Report on the Census of England and Wales, 1881, page 67.

Lunacy in Queensland. 713. The census returns of Queensland contain a return of the number of lunatics in asylums, but give no account of those in private houses, gaols, &c. The number was 563, or 1 in 379 of the population, which is a higher proportion than that which the total number of lunatics bore to the population of New Zealand or South Australia, but not so high as that which obtained in the other two colonies furnishing returns.

Idiocy. 714. Persons returned as idiots were in the proportion of 1·87 per 10,000 of the population; 2·38 idiot males per 10,000 males, 1·29 idiot females per 10,000 females. These proportions may be otherwise stated as 1 idiot in every 5,356 persons, 1 idiot male in every 4,186 males, 1 idiot female in every 7,741 females.

Increase of idiocy. 715. The census of 1871 was the first at which returns of idiocy were obtained in this colony. The proportion then was 1 idiot in every 6,773 persons, or not so high a proportion as that found to exist at the census of 1881.

Idiocy in England and Wales. 716. In England and Wales idiots were combined with imbeciles at the census of 1881, therefore comparison with Victoria, where idiots alone were returned, may not be fair. The proportion of idiots and imbeciles to the population of England and Wales was a very high one, viz., 1 person so afflicted in every 794 persons living.*

Idiocy in Australasian colonies. 717. Idiocy as distinguished from lunacy was not returned in any colony of the group except Victoria, New Zealand, and Tasmania. In the second of these it was much less prevalent, but in the third much more so than in this colony, as is shown by the following proportions:—

IDIOTS IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 idiot in every ...	...	...	8,447 persons.
2. Victoria	"	"	5,356 "
3. Tasmania	"	"	1,522 "

Idiocy and lunacy. 718. If idiots be combined with lunatics, the proportion would be 1 in every 288 of the population, as against 1 in every 370 of the population in 1871.

Idiocy and lunacy in England and Wales. 719. In England and Wales, according to the census of 1881, the proportion of idiots, imbeciles, and lunatics to the general population was 1 in 307; this, it will be observed, is lower than the ratio which idiots and lunatics bore to the population of Victoria in the same year.

Idiots and lunatics in Australasian colonies. 720. The idiots combined with the lunatics give the following results for four of the Australasian colonies, being all those which obtained the information at the census of 1881:—

* See General Report of the Census of England and Wales, 1881, page 68.

small-pox took place, and 5 deaths occurred, the proportion of vaccinations in 1884 was below the average. In the previous year the vaccinations were equal to about 67 per cent. of the children born; in 1882, 75 per cent.; in 1881 they even exceeded the births by 100—a circumstance due to the alarm occasioned by an outbreak of small-pox, first in Sydney and subsequently on board vessels arriving at Melbourne, which induced a large number of persons at all ages to be vaccinated; in 1880 they were equal to about 73 per cent.; in 1879 and 1878 to 82 per cent.; in 1877 to 87 per cent.; in 1876 to 80 per cent.; in 1875 to 82 per cent.; in 1874 to 83 per cent.; and in 1873 to something less than 80 per cent.

Meteorological observations, 1884.

727. The following are the results of meteorological observations taken at different stations throughout the colony during 1884. These places are arranged in the table in the order of their altitude above the level of the sea. The last three are situated in the interior, but the others are on the sea-board. The times at which the observations for mean temperature and mean atmospheric pressure are obtained differ at the various stations; but a correction is applied, in order to make the results equivalent to those which would be derived from hourly observations taken throughout the day and night:—

METEOROLOGICAL OBSERVATIONS AT VARIOUS STATIONS, 1884.

Stations.	Height above Sea-level.	Temperature in the Shade.		
		Max.	Min.	Mean.
	feet.	°	°	°
Portland	37·0	100·0	33·0	56·4
Gabo Island	50·0	...	...	...
Melbourne	91·3	100·7	29·9	56·7
Cape Otway	270·0	101·0	...	54·9
Wilson's Promontory	300·0	97·0	38·0	55·7
Echuca	314·0	106·0	23·0	57·7
Sandhurst	758·0	105·5	30·0	57·8
Ballarat	1,438·0	99·5	26·0	52·9

Stations.	Mean Atmospheric Pressure.	Days on which Rain fell.	Amount of Rainfall.	Mean Relative Humidity.	Amount of Cloud.
	inches.	No.	inches.	0-1.	0-10.
Portland	29·990	187	35·82	0·73	5·4
Gabo Island ... ..	...	129	32·69	...	5·8
Melbourne	29·944	128	25·85	0·71	6·2
Cape Otway	29·764	137	32·57	0·85	7·9
Wilson's Promontory	29·626	181	37·45	0·75	6·5
Echuca	29·644	52	12·51	...	...
Sandhurst	29·231	109	21·80	0·67	4·2
Ballarat	28·503	144	27·12	0·73	5·5

728. The following are the results for Melbourne in each of the twenty-one years ended with 1884:—

Meteorology
in Mel-
bourne, 1864
to 1884.

METEOROLOGICAL OBSERVATIONS AT MELBOURNE.—RETURN FOR
TWENTY-ONE YEARS.

(Observatory 91·3 feet above the Sea-level.)

Year.	Temperature in the Shade.			Mean Atmospheric Pressure.	Days on which Rain fell.	Amount of Rainfall.	Mean Relative Humidity.	Mean Amount of Cloud.
	Max.	Min.	Mean.					
	°	°	°	inches.	No.	inches.	0-1.	0-10.
1864	96·6	30·5	57·1	29·94	144	27·40	·72	6·1
1865	103·4	30·9	56·5	29·94	119	15·94	·68	5·6
1866	108·2	28·0	57·8	29·95	107	22·41	·70	5·5
1867	108·4	29·7	57·7	29·92	133	25·79	·72	5·7
1868	110·0	27·4	57·1	29·98	120	18·27	·70	5·7
1869	108·4	27·0	57·2	29·94	129	24·59	·71	6·0
1870	109·0	29·6	57·4	29·93	129	33·76	·74	5·8
1871	106·0	32·1	57·7	29·93	125	30·17	·74	5·9
1872	103·3	32·5	57·6	29·92	136	32·52	·74	6·4
1873	102·4	30·2	58·0	29·94	134	25·61	·72	6·0
1874	102·7	29·3	56·6	29·93	134	28·10	·72	6·1
1875	110·4	31·1	56·6	29·89	158	32·87	·72	6·2
1876	110·7	29·0	57·0	29·93	134	24·04	·70	5·8
1877	100·7	31·0	56·7	29·99	124	24·10	·70	5·8
1878	103·4	31·1	57·4	29·90	116	25·36	·71	6·0
1879	106·0	30·5	56·8	29·92	127	19·28	·71	5·8
1880	106·5	29·0	57·8	29·92	147	28·48	·72	6·0
1881	99·9	31·9	57·1	29·97	134	24·08	·68	5·9
1882	110·5	31·5	57·4	29·90	131	22·39	·68	5·6
1883	104·9	31·7	58·0	29·92	130	23·71	·69	5·9
1884	100·7	29·9	56·7	29·94	128	25·85	·71	6·2
Means	105·3	30·2	57·2	29·93	130	25·46	·71	5·9

729. It will be noticed that in 1884, according to observations taken at the Melbourne Observatory, the maximum temperature was about 4½ degrees, and the minimum temperature about one-third of a degree, below the mean of the maxima and minima in twenty-one years; that the mean temperature was half a degree below, but the mean atmospheric pressure and the mean relative humidity were about the average of the same period; also, that, although rain fell on two days less than usual, the amount of cloud which prevailed was much above, and the rainfall was slightly above, the average.

Observations
in 1884 com-
pared with
21-year
means.

730. During the period of twenty-one years a higher temperature than the maximum of 1884 was experienced in seventeen, and a lower one than the minimum in eight, of the previous years; the mean temperature was equalled in one year, and was exceeded in all the other years

Observations
in 1884 and
former
years com-
pared.

except three; the mean atmospheric pressure, the amount of rainfall, and the mean relative humidity were either about, or only slightly above, the average; the number of days on which rain fell was exceeded in all the other years except six; in only one previous year was the mean amount of cloud higher than in 1884.

Mean temperature in Melbourne and elsewhere.

731. The mean temperature of Melbourne over a series of years ($57\cdot2^{\circ}$) corresponds with that of Bathurst, a town in the interior of New South Wales, situated 2,150 feet above the sea-level, and is about equal to that of Washington ($56\cdot9^{\circ}$), Bordeaux ($57\cdot0^{\circ}$), Madrid ($57\cdot2^{\circ}$), and Marseilles ($58\cdot3^{\circ}$). It is lower by $5\frac{1}{3}$ degrees than that of Sydney ($62\cdot5^{\circ}$), and lower by $7\frac{1}{3}$ degrees than that of Adelaide ($64\cdot6^{\circ}$).*

Mean rainfall in Melbourne and elsewhere.

732. The mean rainfall in Melbourne ($25\cdot46$ in.) corresponds approximately with that of Ventnor in England ($25\cdot5$ in.), Bathurst in New South Wales ($25\cdot0$ in.), and Toulouse in France ($24\cdot9$ in.). It is above that in London ($24\cdot0$ in.), Nottingham ($23\cdot7$ in.), or Paris ($22\cdot9$ in.), is 5 inches above that in Adelaide ($20\cdot5$ in.), but is only about half as much as that in Sydney ($50\cdot1$ in.).*

Fall of snow in Melbourne, 1882.

733. It may be remarked that a fall of snow took place in Melbourne on the 26th July, 1882, on which day the lowest temperature in the shade was 37° and the highest 44° . This is a most unusual occurrence, no other such instance being remembered since the 29th and 30th August, 1849, when snow fell heavily.

Meteorology elsewhere treated on.

734. An extended account of the meteorology and climate of Victoria will be found in the *Victorian Year-Book*, 1874, paragraphs 54 to 95.

PART V.—PRODUCTION.

Alienation of Crown lands.

735. The mode of disposing of Crown lands in Victoria has undergone numerous changes.† At first it was necessary that all lands should be offered at auction before passing into the hands of private individuals, an upset price, according to its value, being placed upon it by the

* The observations, except those for Melbourne and Adelaide, have been taken from a work entitled *Physical Geography and Climate of New South Wales*, by H. C. Russell, F.R.A.S., Government Astronomer of that colony.

† Mr. N. Wimble, of the Department of Lands and Survey, has been kind enough to verify the facts in this and the next fourteen paragraphs.